Santa Clara Valley
Water District

Final Engineer's Report

Technical Appendices

Matadero/Barron Creeks Long-Term Remediation Project

October 2002

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SANTA CLARA VALLEY WATER DISTRICT

MATADERO/BARRON CREEKS LONG-TERM REMEDIATION PROJECT

FINAL ENGINEER'S REPORT

TECHNICAL APPENDICES

PROJECT NO. 102109

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OCTOBER 2002

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MATADERO/BARRON CREEKS LONG-TERM REMEDIATION STUDY

FINAL ENGINEER'S REPORT

TECHNICAL APPENDICES

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Structural Investigation Report
Matadero/Barron Creeks Remediation Project
Palo Alto, California
Prepared by: Biggs Cardosa Associates, Inc.
June 2001

Geotechnical Investigation Report
Matadero Creek Remediation Project
Palo Alto, California
Prepared by: Lowney Associates
October 4, 2001

Geotechnical Investigation
Matadero Creek Overflow Bypass Channel
Palo Alto, California
Prepared by: Lowney Associates
September 27, 2001

Phase I Environmental Site Assessment and Soil and Groundwater Quality Screening
Matadero Creek Remediation Project
Palo Alto, California
Prepared by: Lowney Associates
July 15, 1999

Additional Soil and Groundwater Quality Evaluation
Matadero Creek Remediation Project
Palo Alto, California
Prepared by: Lowney Associates
September 4, 2001

R11815

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STRUCTURAL INVESTIGATION REPORT

Matadero / Barron Creeks Remediation Project

Palo Alto, CA

Presented to
Schaaf & Wheeler Consulting Civil Engineers

June 2001

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June 2001

MATADERO / BARRON CREEKS REMEDIATION PROJECT
STRUCTURAL INVESTIGATION REPORT

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0. EXECUTIVE SUMMARY

0. EXECUTIVE SUMMARY

This report outlines Biggs Cardosa Associates, Inc. structural investigation for the Matadero / Barron Creeks Remediation Project located in the City of Palo Alto California. The structural investigation included structural review of proposed channel improvement measures extending along Matadero Creek from the Palo Alto Flood Basin upstream to the Alma Street Culvert.

0.1 Project Summary

In order to best accommodate the revised 1-percent design flood and associated FEMA freeboard requirements, the following channel mitigation measures were developed and reviewed concurrently with the hydraulic design review and recommendations provided by Schaaf & Wheeler Consulting Civil Engineers. Each reach, as shown below, extends between the adjacent Palo Alto Flood Basin and/or adjacent bridge and culvert structure.

Palo Alto Flood Basin: Out of the structural scope of work.

Reach 1: Construct a 50-foot wide concrete lined or concrete block lined bypass around the City's Corporation Yard. Temporary shoring and construction dewatering is anticipated to be required.

Bayshore Freeway Bridges: Out of the structural scope of work.

Reach 2: Raise existing floodwalls approximately 2 to 3 feet. Strengthening or replacement of the existing walls for the full length of the reach is anticipated.

Greer Road Bridge: Raise existing headwalls approximately 2 to 3 feet. Strengthening or replacement of the existing walls is anticipated.

Reach 3: Raise existing floodwalls approximately 2 to 3 feet. Strengthening or replacement of the existing walls for the full length of the reach is anticipated.

Modify approximately 20± feet of existing channel adjacent to the Louis Road Bridge to provide a smooth transition from the existing trapezoid channel to the proposed U-frame channel modification below the bridge. Temporary shoring and construction dewatering is anticipated to be required.

Louis Road Bridge: Replace the existing structure with a new prestressed concrete slab bridge with integral diaphragm abutments supported on piles. The structure is anticipated to follow the same alignment as the existing structure and the proposed soffit elevation should be approximately 1'-0"± above the existing soffit level. Reuse of the existing bridge piles is anticipated.

	Replace the existing trapezoidal concrete channel lining underneath the bridge with a full U-frame channel section along the same alignment. Temporary shoring and construction dewatering is anticipated to be required.
Reach 4:	Raise existing floodwalls approximately 2 to 3 feet. Strengthening or replacement of the existing walls from Sta. 128+30 to 138+76 is anticipated. Modify approximately 40± feet of existing channel adjacent to the Louis Road Bridge to provide a smooth transition from the existing trapezoid channel to the proposed U-frame channel modification below the bridge. Temporary shoring and construction dewatering is anticipated to be required.
Ross Road Bridge:	Raise the existing upstream headwall approximately 1 foot.
Reach 5:	Raise existing floodwalls approximately 1 to 3 feet. Strengthening or replacement of the existing walls for the full length of reach is anticipated.
Middlefield Road Bridge:	No modification required.
Reach 6:	Raise existing floodwalls by up to approximately 1 foot for approximately 350 lineal feet upstream of the modified Middlefield Road Bridge.
Cowper Street Bridge:	No modification required.
Reach 7:	Raise existing floodwalls approximately 2 feet. Strengthening or replacement of the existing walls for the full length of reach is anticipated.
Waverley Street Bridge:	Raise existing upstream headwall approximately 1½ feet.
Reach 8:	Raise existing floodwalls approximately 1 to 5 feet. Strengthening or replacement of the existing walls from Sta. 159+46 to 161+23 is anticipated.
Bryant Street Bridges:	No modification required.
Reach 9:	Raise existing floodwalls approximately 1 foot for the full length of the reach.
Alma Street Culvert:	Out of the structural scope of work.

0.2 Anticipated Construction Costs

Anticipated structural construction cost of $8,800,000. See Anticipated Structure Construction Costs, included at the end of Section 0. for cost breakdowns by bridge structure and channel reach. Costs include 10% for mobilization and a 20% contingency. The cost estimate includes structural items of work only and does NOT include any costs associated with the following items:

- Traffic control and temporary detours
- Relocation / protection of existing utilities
- Roadway improvements beyond the limits of the Louis Road Bridge Replacement
- Maintenance access ramp improvements
- Temporary or permanent right-of-way acquisition
- Environmental mitigation
- Improvements of adjacent facilities / properties

0.3 Anticipated Construction Schedule

The proposed mitigation measures are anticipated to require approximately 7 months to complete the major structural components of work upstream of Bayshore Freeway and approximately 5 months to complete the major structural components of work downstream of Bayshore Freeway. See Suggested Work Schedule, included at the end of Section 0. for anticipated construction staging and work breakdowns by bridge structure and channel reach. In order to meet environmental approval, it is anticipated that all work within or affecting the creek channel, such as bridge replacements and channel modifications, will be required to be confined to the period between April 15 and October 15. As a result, multiple crews and extended work hours may be required to complete the work within the allotted environmental construction window.

Additionally, it is anticipated that environmental approval for the work downstream of Bayshore Freeway may take longer than that required for the portions of work upstream of Bayshore Freeway, potentially requiring the work to be divided into two separate construction seasons. The first season should provide for completion of all of the portions of work upstream of Bayshore Freeway (thus allowing for district to apply for FEMA remapping) and the second season would then consist of all of the downstream construction and environmental mitigation work.

The attached schedule does not include additional time for roadway approach work or potential delays associated with coordination with outside agencies (such as utility companies or environmental agencies).

0.4 Exhibits

- Anticipated Structure Construction Costs
- Suggested Work Schedule

MATADERO CREEK REMEDIATION PROJECT

ANTICIPATED STRUCTURE CONSTRUCTION COSTS

REACH / STRUCTURE	PROPOSED IMPROVEMENTS	REMARKS
Palo Alto Flood Basin	$ -	Out of scope
1	$ 4,650,000	Construct concrete bypass channel
Bayshore Freeway Bridges (Highway 101)	$ -	Out of scope
2	$ 722,000	Raise floodwalls
Greer Road Bridge	$ 26,000	Raise headwalls
3	$ 780,000	Raise floodwalls and modify channel
Louis Road Bridge	$ 462,000	Replace existing bridge and modify channel
4	$ 814,000	Raise floodwalls and modify channel
Ross Road Bridge	$ 7,000	Raise headwalls
5	$ 660,000	Raise floodwalls
Middlefield Road Bridge	$ -	N / A
6	$ 15,000	Raise floodwalls
Cowper Street Bridge	$ -	N / A
7	$ 337,000	Raise floodwalls
Waverly Street Bridge	$ 6,000	Raise headwalls
8	$ 151,000	Raise floodwalls
Bryant Street Bridges	$ -	N / A
9	$ 169,000	Raise Floodwalls
Alma Street / SPRR Culvert	$ -	Out of scope
STRUCTURAL TOTAL	**$ 8,800,000**	**See notes**

NOTES:

1. Includes structural items of work only.
2. Costs include 10% mobilization and 20% contingency.
3. Assumes full FEMA freeboard requirements.
4. Excludes maintenance ramp modifications.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SUGGESTED WORK SCHEDULES

DPD-OSD-0037 (REV. 2/92)

PROJECT	CU	EA	COMPILED BY	DATE
MATADERO / BARRON CREEKS REMEDIATION PROJECT			A. NOTARO	03/14/00

District 04 County SCI Route Local Post Mile ______ Number of Days Allotted 145 / 100

Structure MATADERO CREEK REACHES 1 THROUGH 9 Bridge Number N/A

DESCRIPTION OF WORK	<--------------->				20 WORK				DAYS																															
MOBILIZATION	▨	▨																																						
LOUIS ROAD BRIDGE REPLACEMENT &			▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨																				
CHANNEL MODIFICATION (REACHES 3 & 4)																																								
FLOODWALL MODIFICATION (REACHES 2 & 3) &			▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨												
HEADWALL MODIFICATION (GREER)																																								
FLOODWALL MODIFICATION (REACHES 4 & 5) &			▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨												
HEADWALL MODIFICATION (ROSS)																																								
FLOODWALL MODIFICATION (REACHES 6, 7, 8 & 9) &			▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨												
HEADWALL MODIFICATION (WAVERLEY)																																								
DEMOBILIZATION																													▨											
MOBILIZATION	▨	▨																																						
OVERFLOW BYPASS (REACH 1)			▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨																					
DEMOBILIZATION																				▨																				

1. INTRODUCTION

1. INTRODUCTION

1.1 Project Background

In July 1996 the Santa Clara Valley Water District completed a series of flood control improvements on Matadero and Barron Creeks. These improvements involved bridge and channel modifications on Matadero Creek, and a facility to divert excess flow from Barron Creek into Matadero Creek near Gunn High School. The intent of these improvements was to remove property adjacent to the creeks from floodplains shown on the Nation Flood Insurance Program maps administered by the Federal Emergency Management Agency (FEMA).

The completed improvements significantly increased flood protection to affected properties, however, based on post project flood events and updated hydraulic analysis, they do not fully support the stated objected of removing adjacent properties from the identified floodplains. In order to provide protection that meets the national standard, the capacity of Matadero Creek needs to be increased such that the 1-percent design flood, including full Barron Creek diversions, can be conveyed within the modified channel.

1.2 Project Goals

The major goal of this study is to provide the Santa Clara Valley Water District with a conceptual design review of existing facilities and proposed mitigation measures along Matadero Creek. The conceptual design review includes structural investigation of existing and proposed facilities and constructibility review and cost analysis of proposed mitigation measures.

1.3 Preliminary Analysis

In April 1998 the SCVWD issued a memorandum by the Flood Management Policy and Planning Unit outlining proposed mitigation measures for Matadero Creek. The proposed improvements consisted of the following:

- Raising existing floodwalls (1 to 3 feet) along the channel to provide necessary FEMA freeboard (Bayshore Freeway to El Camino Real).
- Modify existing trapezoidal concrete channel section to a 36-foot wide concrete U-frame section (Louis Road to Ross Road). A 6-foot wide fish passage channel would also be provided.
- Replace the center 20 feet of the existing trapezoidal concrete channel section with a deeper U-frame concrete section (Ross Road to Alma Street). A 6-foot wide fish passage channel would also be provided.
- Round soffit ends to 12" minimum radius (most bridge structures).

Schaaf & Wheeler Consulting Engineers performed a preliminary hydrologic/hydraulic analysis of the Palo Alto Flood Basin and the existing and proposed Matadero and Barron Creek channels and watersheds. The results of the preliminary hydraulic study indicate that the 1-percent design water surface elevation of the lower reaches of the creek are controlled by downstream channel constrictions when Matadero Creek is discharging at its peak. This results in severe backwater effects that impact creek levels as far upstream as Louis Road. Upstream of Louis Road, the water surface is controlled by the flow magnitude and channel capacity.

Based on the severe backwater effects determined in the preliminary hydraulics study, a significant portion of the SCVWD mitigation measures were determined to be only marginally effective. As a result, additional engineering alternatives and combinations of mitigation measures were reviewed in tandem with Schaaf & Wheeler in order to provide the SCVWD with a constructible and cost effective solution to best meet the project objectives. The structural findings of this cost / benefit solution are summarized in the following major sections:

2. **MATADERO CREEK (Palo Alto Flood Basin to Bayshore Freeway)**
3. **MATADERO CREEK (Bayshore Freeway to Alma Street)**
4. **BARRON CREEK (Including Barron Creek Diversion)**

1.4 Design Criteria

All structural review and design is based on the current edition of the Caltrans "Bridge Design Specifications" manual.

All geotechnical parameters utilized during the structural investigation are based on geotechnical design data provided by Lowney Associates in their draft reports titled:

- "Geotechnical Investigation Matadero Creek Remediation Project Palo Alto California" dated September 27, 1999 (Report No. 1453-1)
- "Matadero Creek Remediation Project Task 12-D/S Alternatives Evaluation Limited Geotechnical and Hazardous Materials Evaluation Palo Alto, California" dated November 24, 1999 (Report No. 1453-1b)

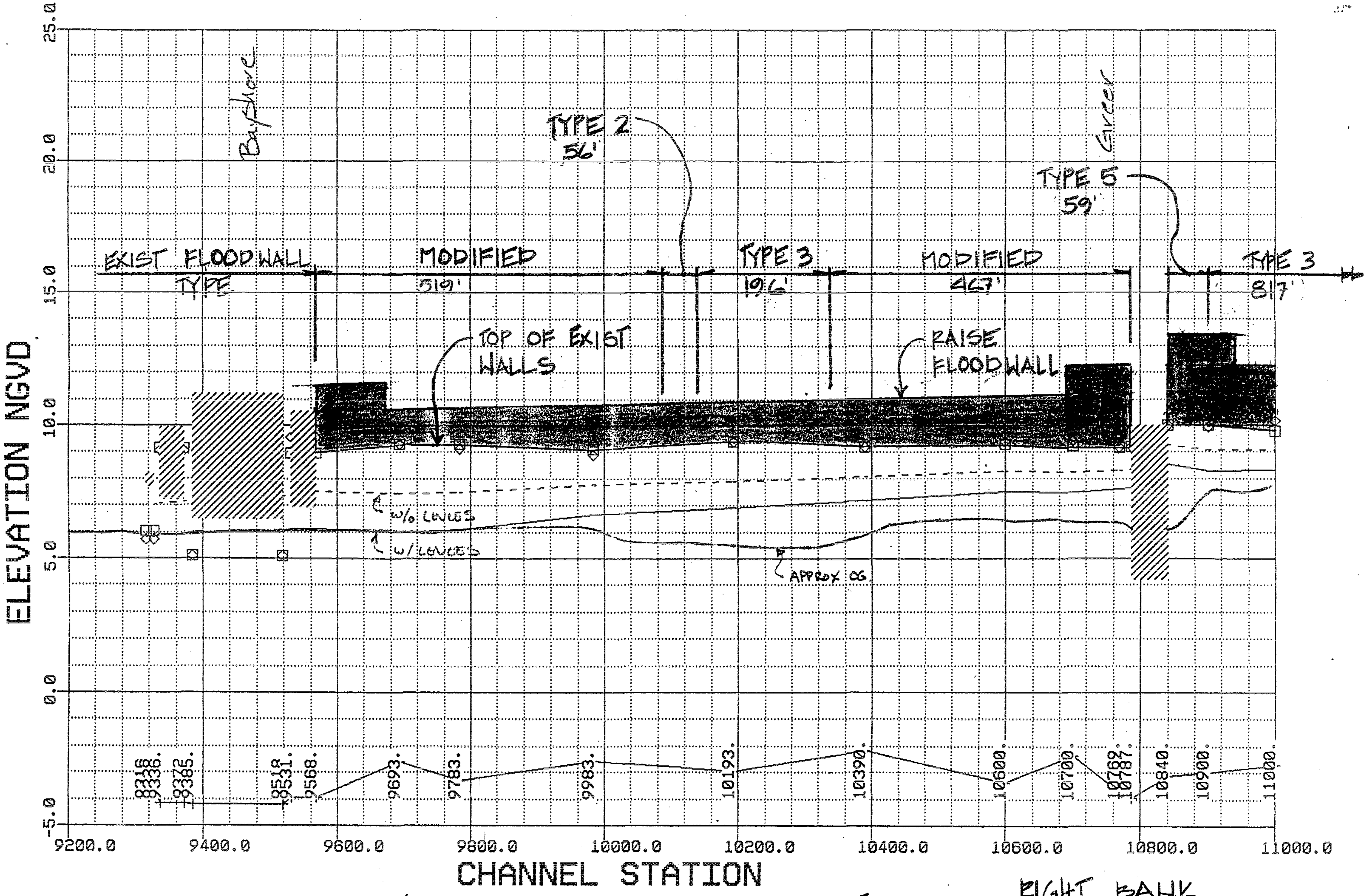
All hydraulic parameters utilized during the structural investigation are based on hydraulic analysis performed by Schaaf & Wheeler Consulting Civil Engineers. The 1-percent design flood elevations for the modified channel are included at the end of Section 1. The structural components were reviewed for the anticipated maximum water surface consisting of the 100-year design flood plus the greater of the following freeboard criteria:

• Full FEMA criteria:	3.0 feet (for design water surface above natural ground) 4.0 feet (within 100 feet of bridges or other constrictions)
• SCVWD criteria:	1.0 foot (for design water surface below natural grade) Two-tenths of the total energy (depth of flow + $V^2 / 2g$)

Unless noted otherwise, all elevations listed in this report, including all existing and proposed channel and water surface elevations, are based on the NGVD '29 datum.

1.5 Exhibits

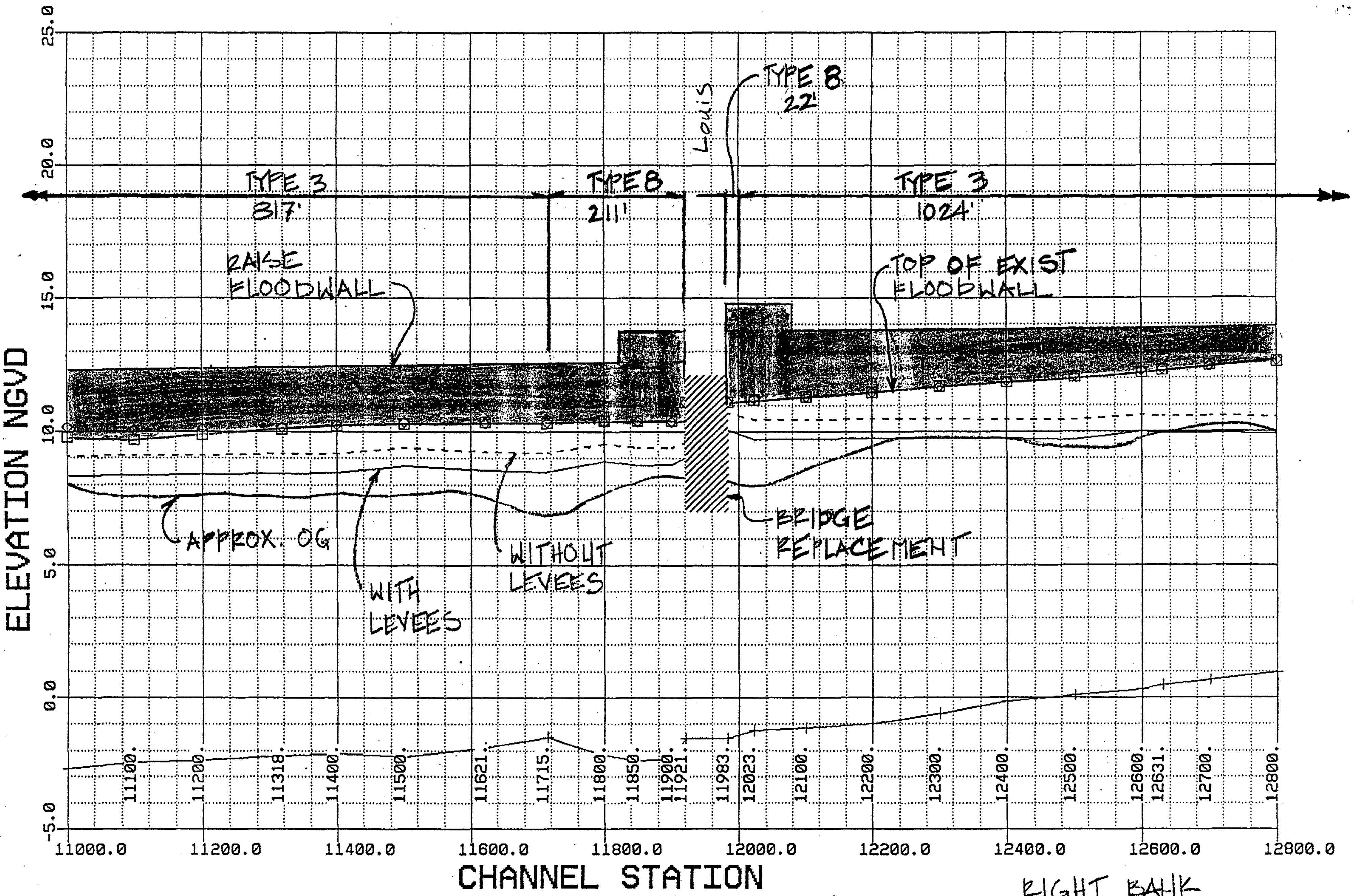
- Channel Elevations (Right Bank)
- Channel Elevations (Left Bank)



MATADERO CREEK (NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

RIGHT BANK

Recommended Plan

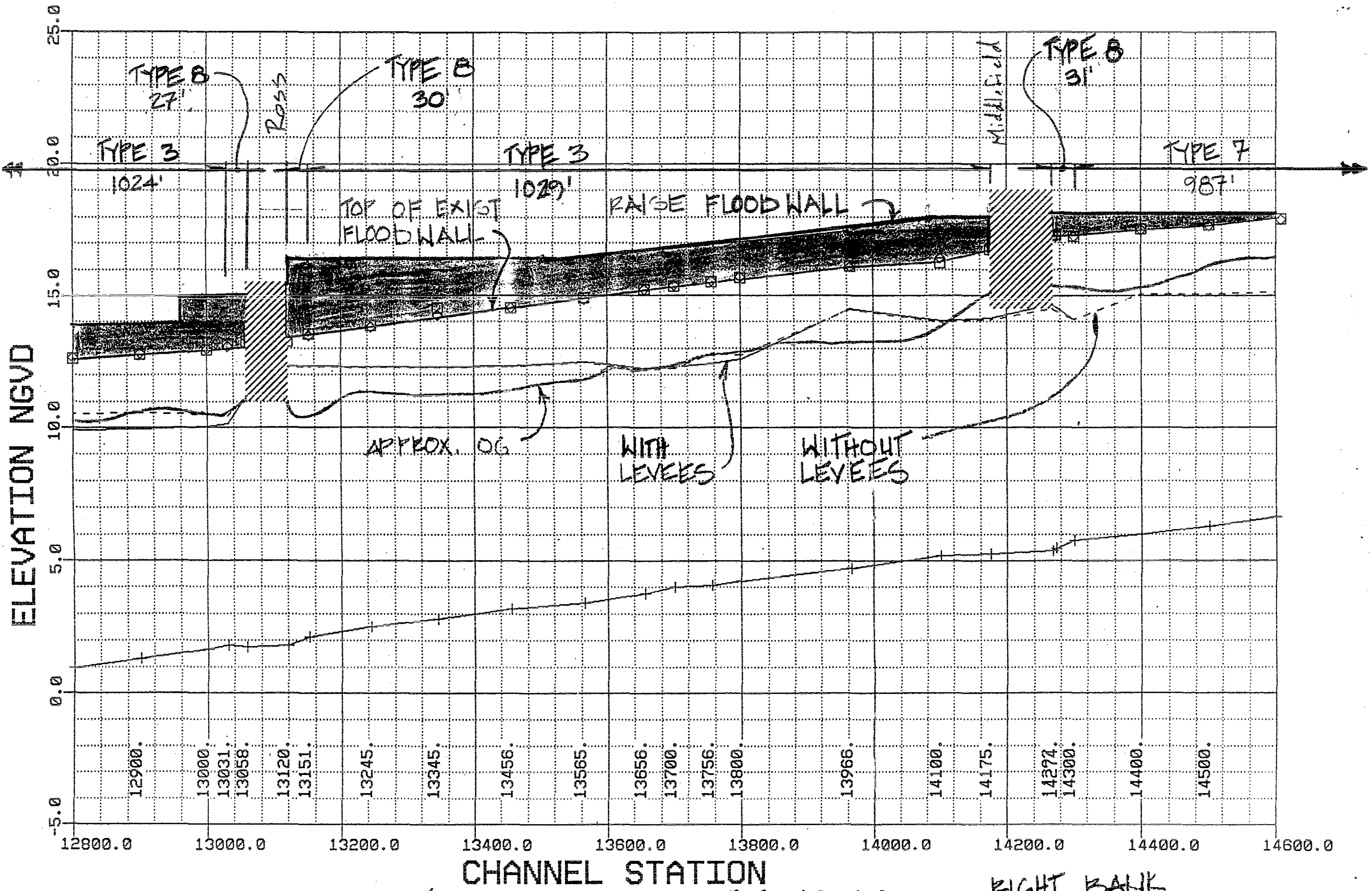


MATADERO CREEK

(NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

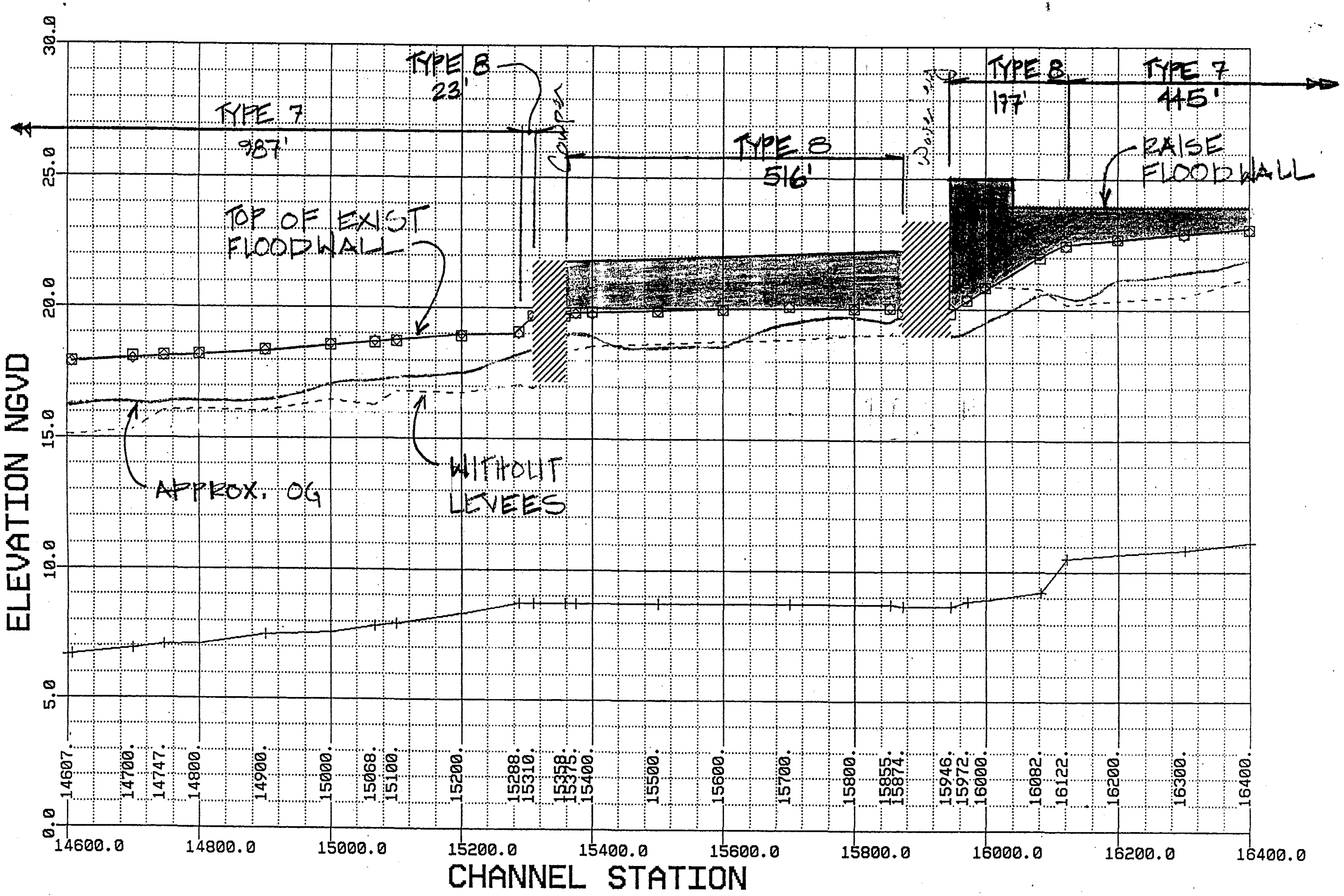
RIGHT BANK

RECOMMENDED PLAN



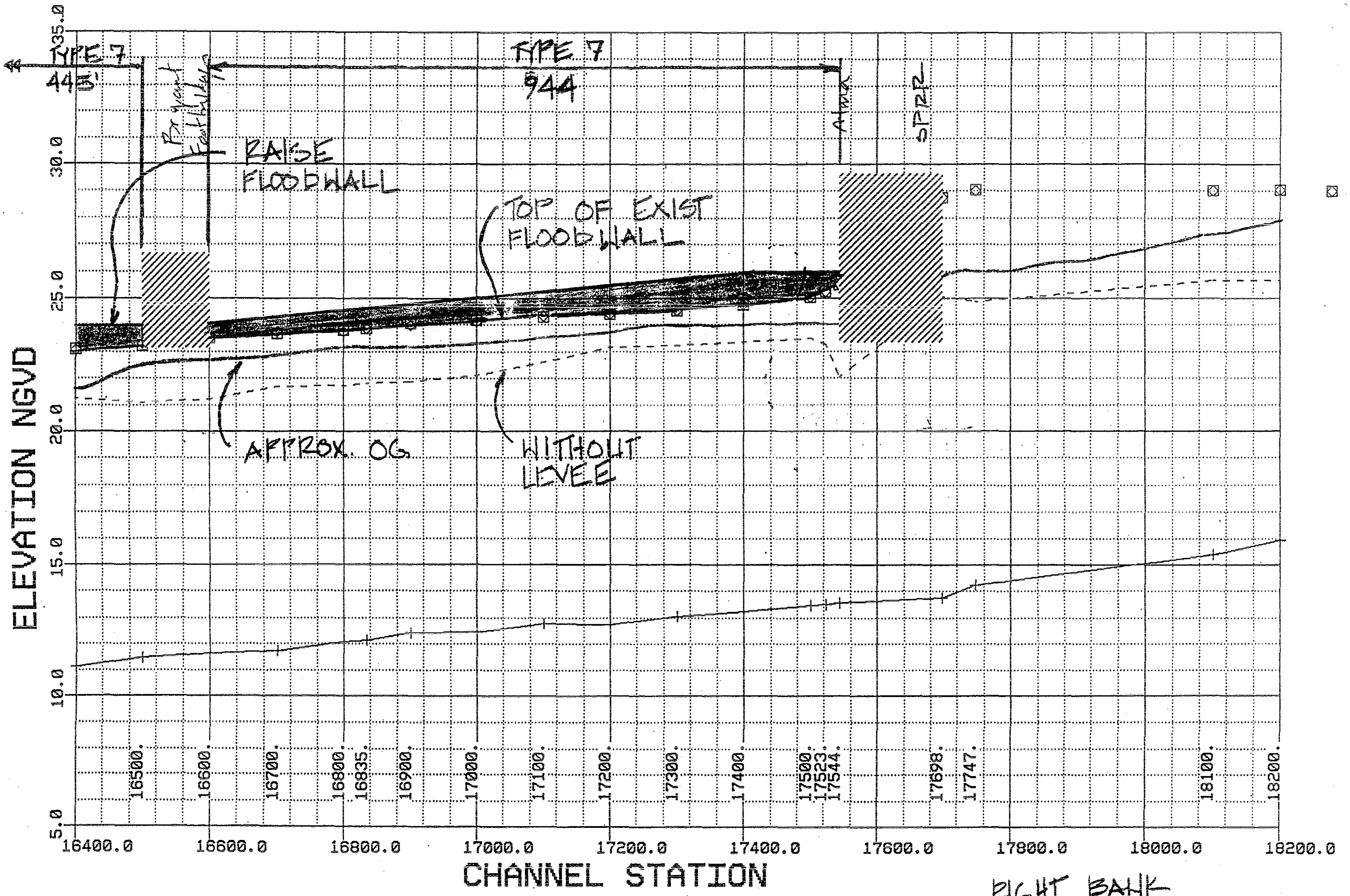
MATADERO CREEK (NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

RIGHT BANK
RECOMMENDED PLAN



MATADERO CREEK (NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

RIGHT BANK
RECOMMENDED PLAN

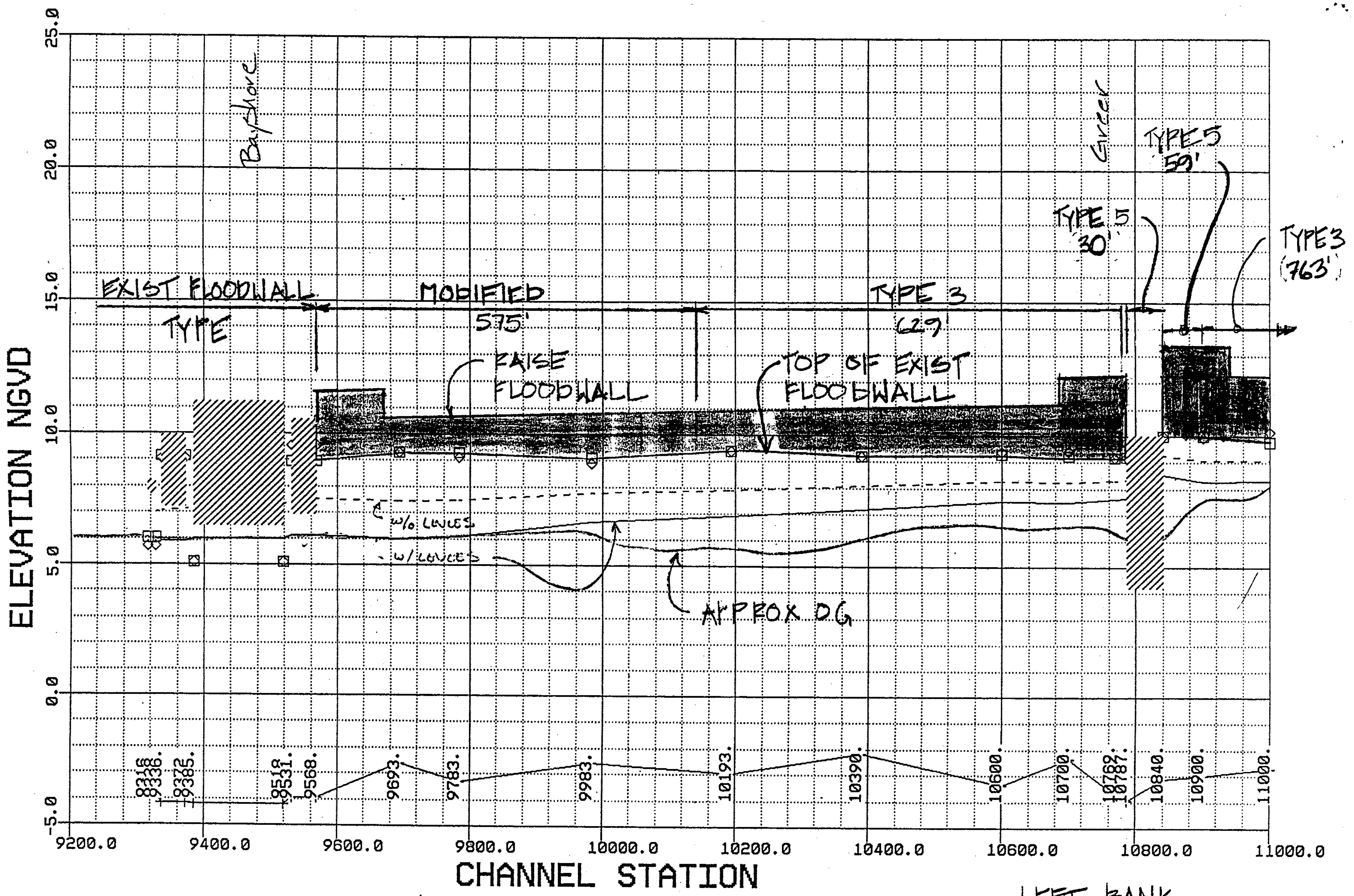


MATADERO CREEK

(NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

RIGHT BANK

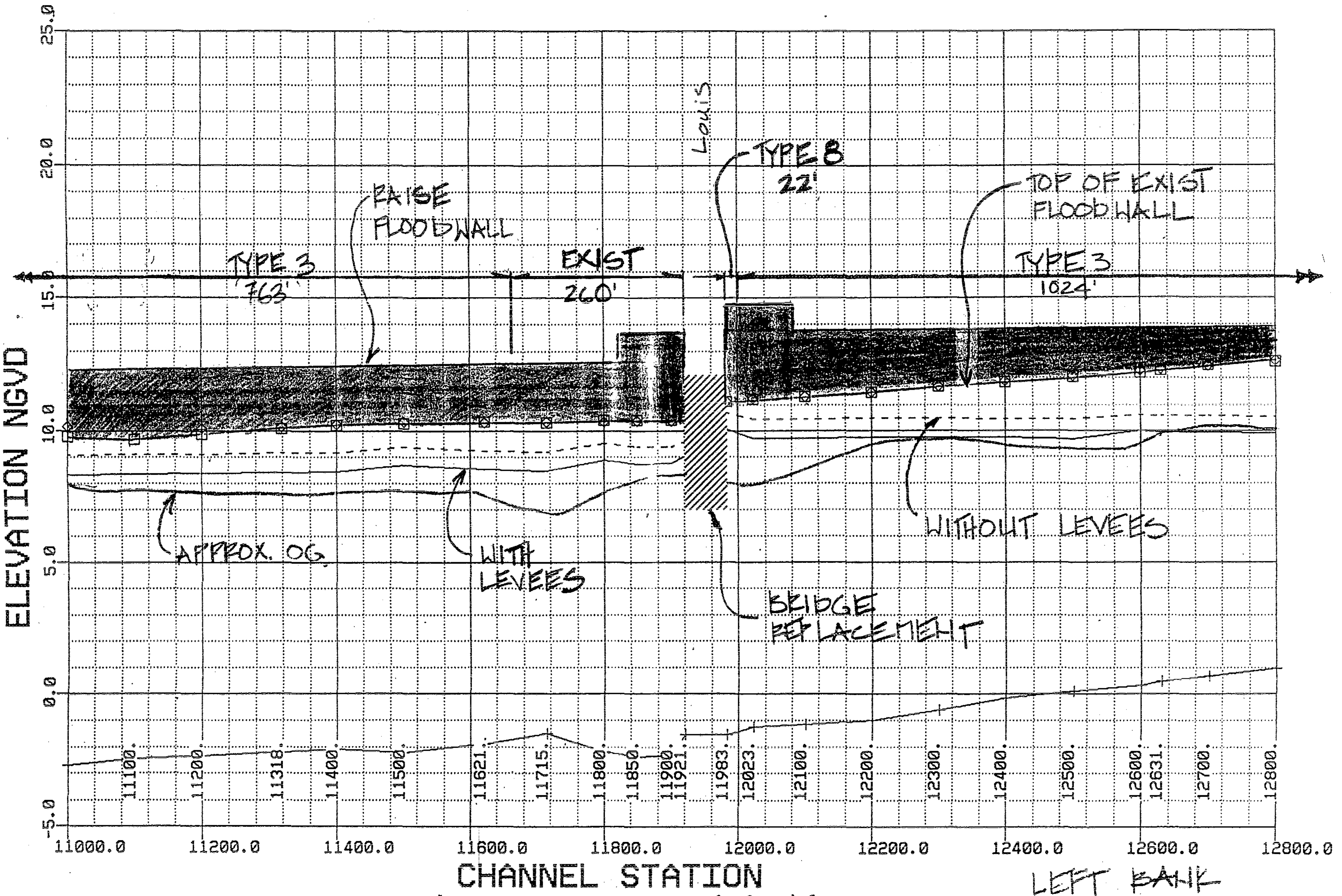
RECOMMENDED PLAN



MATADERO CREEK (NOTE: CHANNEL STATIONS
DO NOT MATCH AS-BUILT PLANS)

LEFT BANK

Recommended Plan

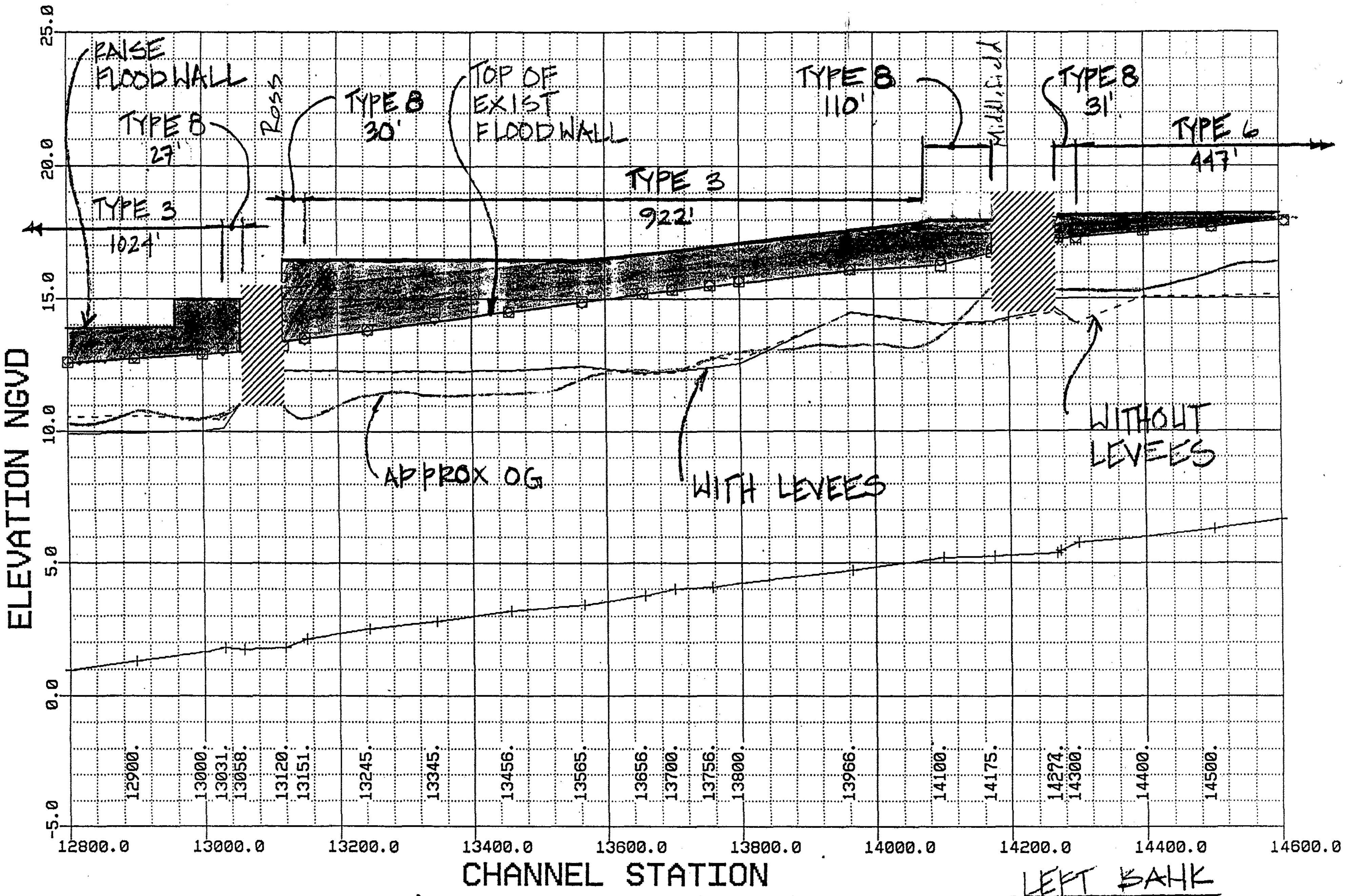


MATADERO CREEK

(NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

LEFT BANK

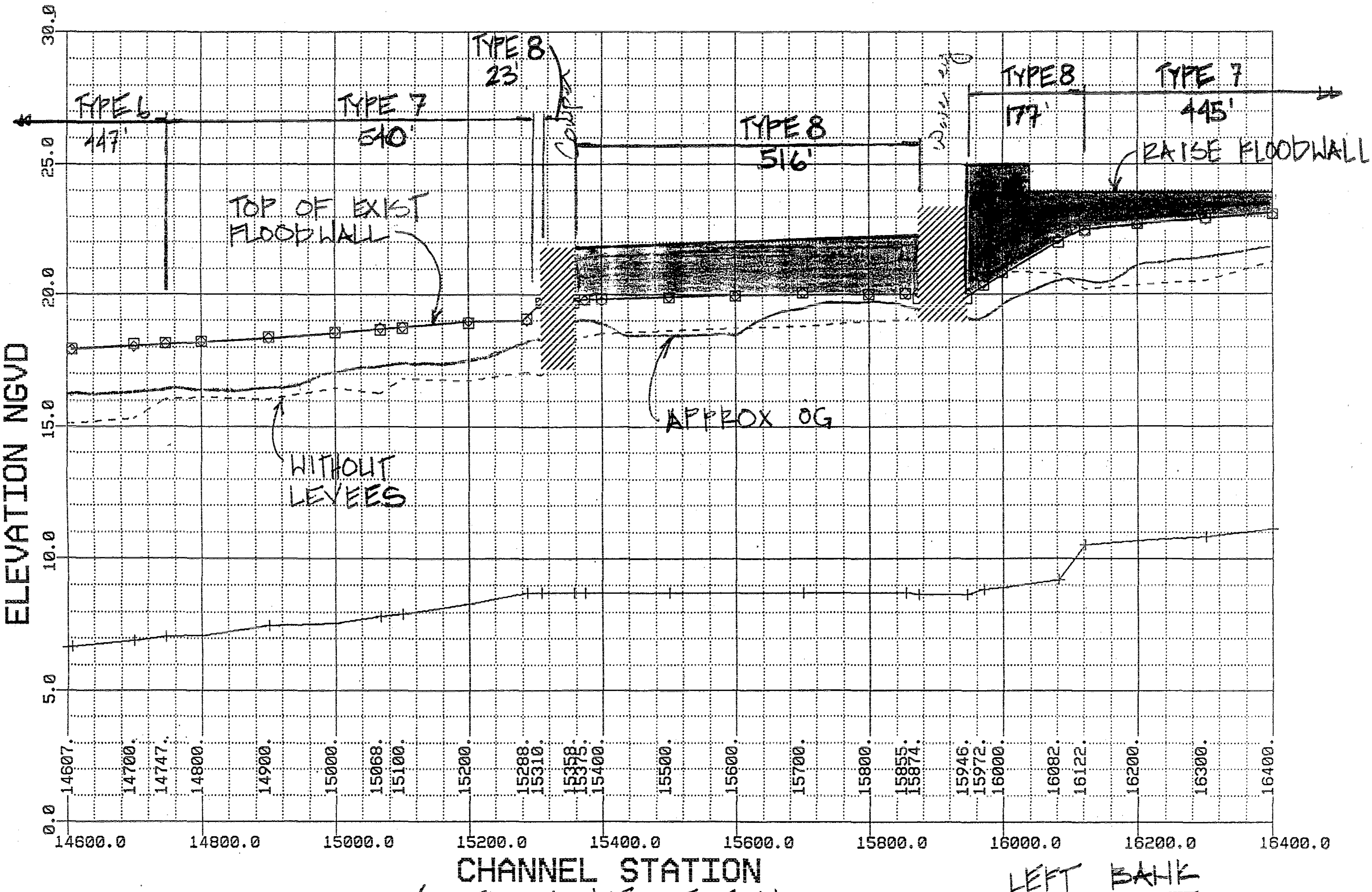
RECOMMENDED PLAN



MATADERO CREEK (NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

LEFT BANK

RECOMMENDED PLAN

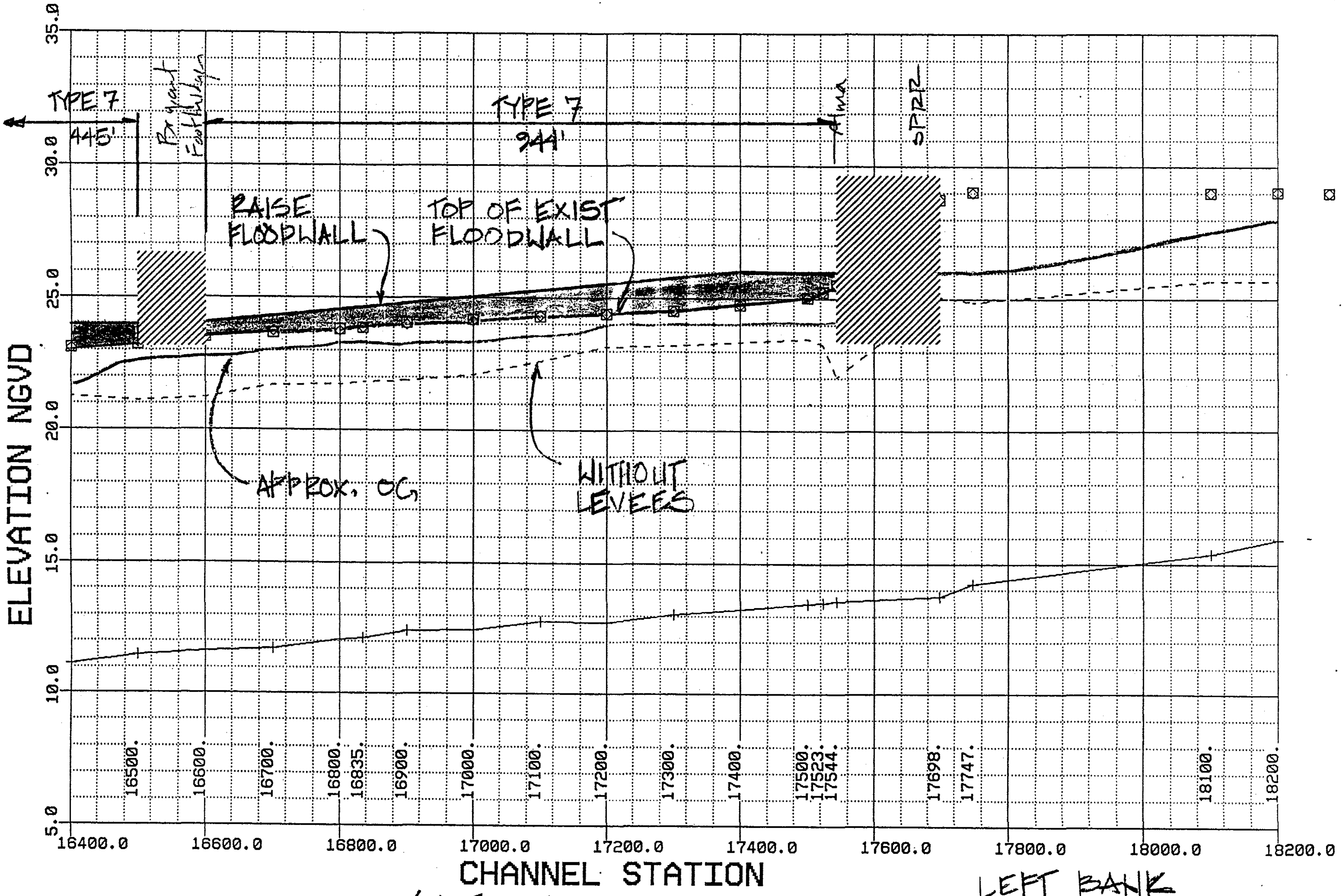


MATADERO CREEK

(NOTE: CHANNEL STATIONS
DO NOT MATCH AS-BUILT PLANS)

LEFT BANK

RECOMMENDED PLAN



MATADERO CREEK (NOTE: CHANNEL STATIONS DO NOT MATCH AS-BUILT PLANS)

LEFT BANK

RECOMMENDED PLAN

2. MATADERO CREEK
(Palo Alto Flood Basin to Bayshore Freeway)

2. MATADERO CREEK (Palo Alto Flood Basin to Bayshore Freeway)

2.1 Overflow Bypass

The selected alternative for improving the conveyance of flows downstream of Bayshore Freeway consists of a 50-foot wide concrete lined or concrete block lined bypass. The overflow bypass would be constructed parallel to the existing channel and along the northern edge of the City's Corporation Yard (Corp Yard). This bypass would take the 15 to 20 foot wide bank area along the fence line parallel to the existing channel, and an additional 30 to 35 feet of "jurisdictional" channel area. The proposed bypass would turn southeast and follow the fence east of the Corp Yard and daylight out to the Palo Alto Flood Basin (PAFB). The existing levee and gravel road would provide access to and be terminated at the new outlet structure to the PAFB. The remaining levee and gravel road along the east side of the Corp Yard would be removed and portions replanted as part of the revegetation program.

2.2 Concrete Lined Bypass

Construction of the proposed concrete lined bypass would consist of the following (see Typical Cross Section included at the end of Section 2):

1. Driving temporary sheet piling (or soldier pile and lagging) adjacent to the Corp Yard fence line to retain the side of the 10± foot deep excavations and to limit groundwater infiltration and facilitate dewatering during construction.
2. Driving temporary sheet piling (as required) along the channel/maintenance road side of the proposed bypass to retain the side of the 5± foot deep excavations and to limit groundwater infiltration and facilitate dewatering during construction.
3. Installation of drain rock / bridging material overlaying geotextile stabilization fabric along the bypass invert to facilitate dewatering and to provide a suitable working platform for the construction equipment.
4. Construction of a concrete invert slab. Thickness will vary.
5. Construction of concrete bypass walls cantilevered from the invert slab. Walls will be backfilled with permeable material prior to removal of temporary shoring. Chain link fencing will be provided for safety along the top of the channel wall adjacent to the Corp Yard.
6. Removal of the temporary shoring.
7. Planting adjacent to Corp Yard and within overflow bypass optional plantable bench.

Preliminary design assumptions include:

1. Ground water elevation of 0.0 to 2.0 based on preliminary geotechnical investigation.
2. Preliminary bypass layout and sizing is based on a rigid and undrained wall system:

• Equivalent fluid pressure:	55 pcf
• Uniform pressure:	8H psf
• Add'l undrained pressure:	40 pcf (below water table)
• Surcharge:	2 feet level earth

3. Long-term buoyancy effects on the structure are assumed to be negligible. Since the bypass is open to the creek and flood basin flows, water levels within the bypass and adjacent ground water should be fundamentally equal.
4. Short-term buoyancy effects during maintenance operations are potentially significant with ground water levels as high as 2± feet above the bypass invert. However, maintenance operations are likely to be performed during the summer months when the ground water levels have subsided, thus reducing the demand on the structure. Additional ground water data will be required during final design to fully address the short-term buoyancy issue.
5. A top of wall elevation of 10.5 has been assumed for the bypass wall adjacent to the Corp Yard to meet FEMA tidal freeboard criteria. Alternatively, an assumed minimum top of wall elevation of only 7.0 is required to maintain the current flood protection / risk level at the Corp Yard. Cost estimates for both alternatives have been included.
6. Preliminary review focused primarily on the typical bypass section. Special detailing and design will be required at the inlet and outlet structures to the bypass in order to facilitate temporary maintenance cut-off of creek and PAFB flows and for the construction of a maintenance access ramp structure.

That anticipated structural construction cost is $4,500,000 (top of wall elev. = 10.5) and $4,350,000 (top of wall elev. = 7.0). Costs include 10% for mobilization and a 30% contingency. Given the early stage in which this estimate has been generated and the uncertainty of the magnitude of dewatering that will be required, we feel that this contingency is appropriate. The above cost estimate includes structural items of work only and does NOT include any costs associated with the following items:

- Traffic control and temporary detours
- Relocation of existing utilities
- Removal of portions of the existing gravel road
- Temporary or permanent right-of-way acquisition
- Environmental mitigation
- Improvements of adjacent facilities / properties

The proposed concrete bypass is anticipated to require approximately 5 months to complete the major structural components: shoring, drain rock, slab and walls. This time frame does not include time for removal of the existing gravel road, environmental mitigation, architectural work such as finishes and assumes no significant interruption from the adjacent Corp Yard.

2.3 Concrete Block Lined Bypass

Construction of the proposed concrete block lined bypass would consist of the following (see Typical Cross Section included at the end of Section 2):

1. Driving temporary sheet piling (or soldier pile and lagging) adjacent to the Corp Yard fence line to retain the side of the 10± foot deep excavations and to limit groundwater infiltration and facilitate dewatering during construction.

2. Driving temporary sheet piling (as required) along the channel/maintenance road side of the proposed bypass to retain the side of the 5± foot deep excavations and to limit groundwater infiltration and facilitate dewatering during construction.
3. Installation of drain rock / bridging material overlaying geotextile stabilization fabric along the bypass invert to facilitate dewatering and to provide a suitable working platform for the construction equipment.
4. Construction of a concrete invert slab. Thickness will vary.
5. Construction of precast concrete block lined bypass walls (Keystone™ or approved equal) on top of the concrete invert slab. Soil reinforcing is anticipated to be required behind the block wall adjacent to the Corp Yard. Chain link fencing will be provided for safety along the top of the channel wall adjacent to the Corp Yard.
6. Removal of the temporary shoring.
7. Planting adjacent to Corp Yard and within precast block wall plantable benches.

Preliminary design assumptions include:

1. Ground water elevation of 0.0 to 2.0 based on preliminary geotechnical investigation.
2. Preliminary block wall bypass layout and sizing is based on manufacturer design charts contained in *Keystone™ Retaining Wall Systems Design and Construction Manual.*
3. Long-term buoyancy effects on the structure are assumed to be negligible. Since the bypass is open to the creek and flood basin flows, water levels within the bypass and adjacent ground water should be fundamentally equal.
4. Short-term buoyancy effects during maintenance operations are potentially significant with ground water levels as high as 2± feet above the bypass invert. However, the block wall system is not watertight and maintenance operations are likely to be performed during the summer months when the ground water levels have subsided, thus reducing the potential demand on the structure. Additional ground water data will be required during final design to fully address the short-term buoyancy issue.
5. A top of wall elevation of 7.0 has been assumed for the bypass wall adjacent to the Corp Yard to maintain the current flood protection / risk level at the Corp Yard.
6. Preliminary review focused primarily on the typical bypass section. Special detailing and design will be required at the inlet and outlet structures to the bypass in order to facilitate temporary maintenance cut-off of creek and PAFB flows and for the construction of a maintenance access ramp structure.

That anticipated structural construction cost is $4,650,000 (top of wall elev. = 7.0). Costs include 10% for mobilization and a 30% contingency. Given the early stage in which this estimate has been generated and the uncertainty of the magnitude of dewatering that will be required, we feel that this contingency is appropriate. The above cost estimate includes structural items of work only and does NOT include any costs associated with the following items:

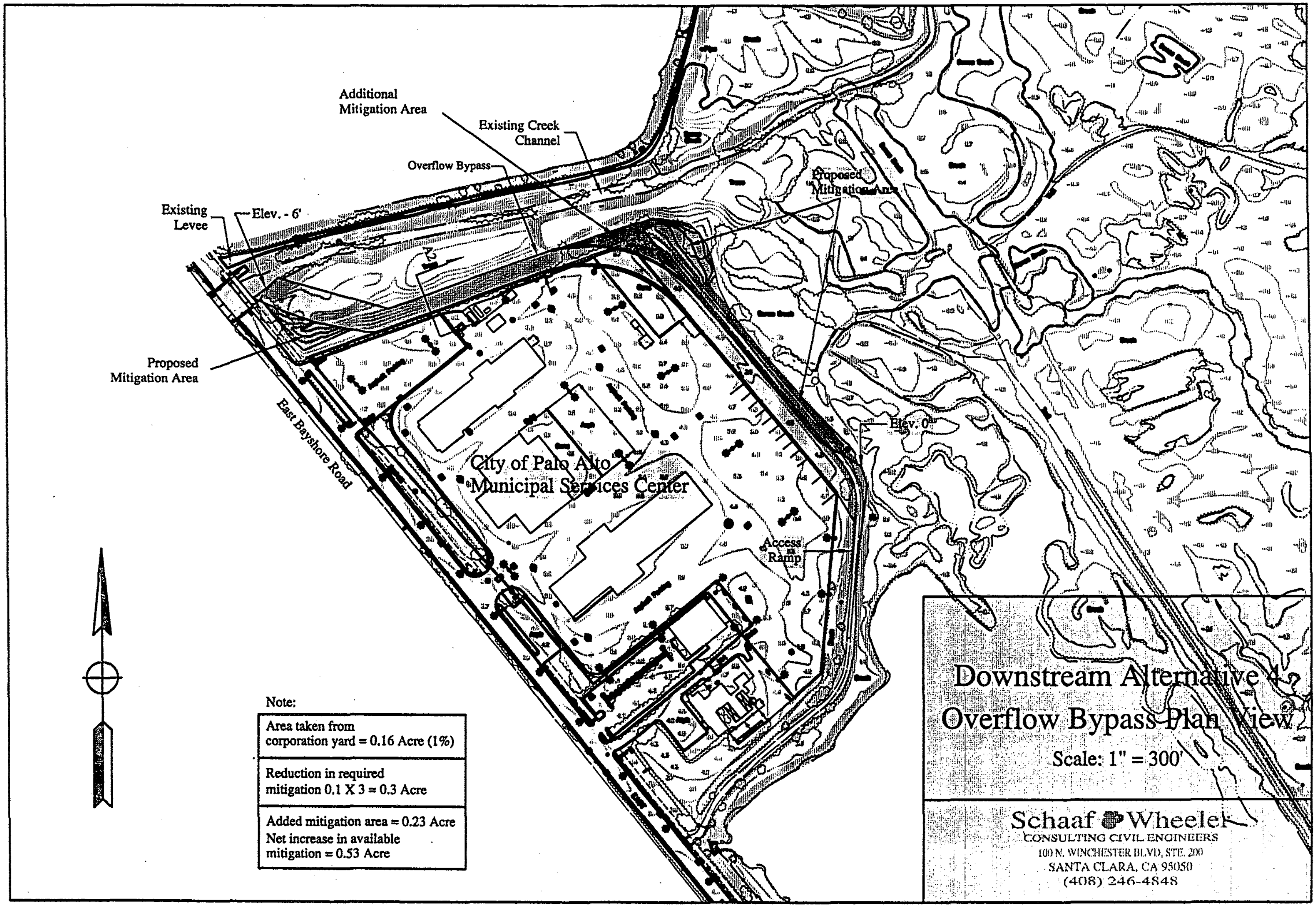
- Traffic control and temporary detours
- Relocation of existing utilities
- Removal of portions of the existing gravel road
- Temporary or permanent right-of-way acquisition

- Environmental mitigation
- Improvements of adjacent facilities / properties

The proposed block wall lined bypass is anticipated to require approximately 5 months to complete the major structural components: shoring, drain rock, slab and block walls. This time frame does not include time for removal of the existing gravel road, environmental mitigation, and assumes no significant interruption from the adjacent Corp Yard.

2.4 Exhibits

- Overflow Bypass Conceptual Plan
- Overflow Bypass Typical Sections
- Suggested Work Schedules



Note:

Area taken from corporation yard = 0.16 Acre (1%)

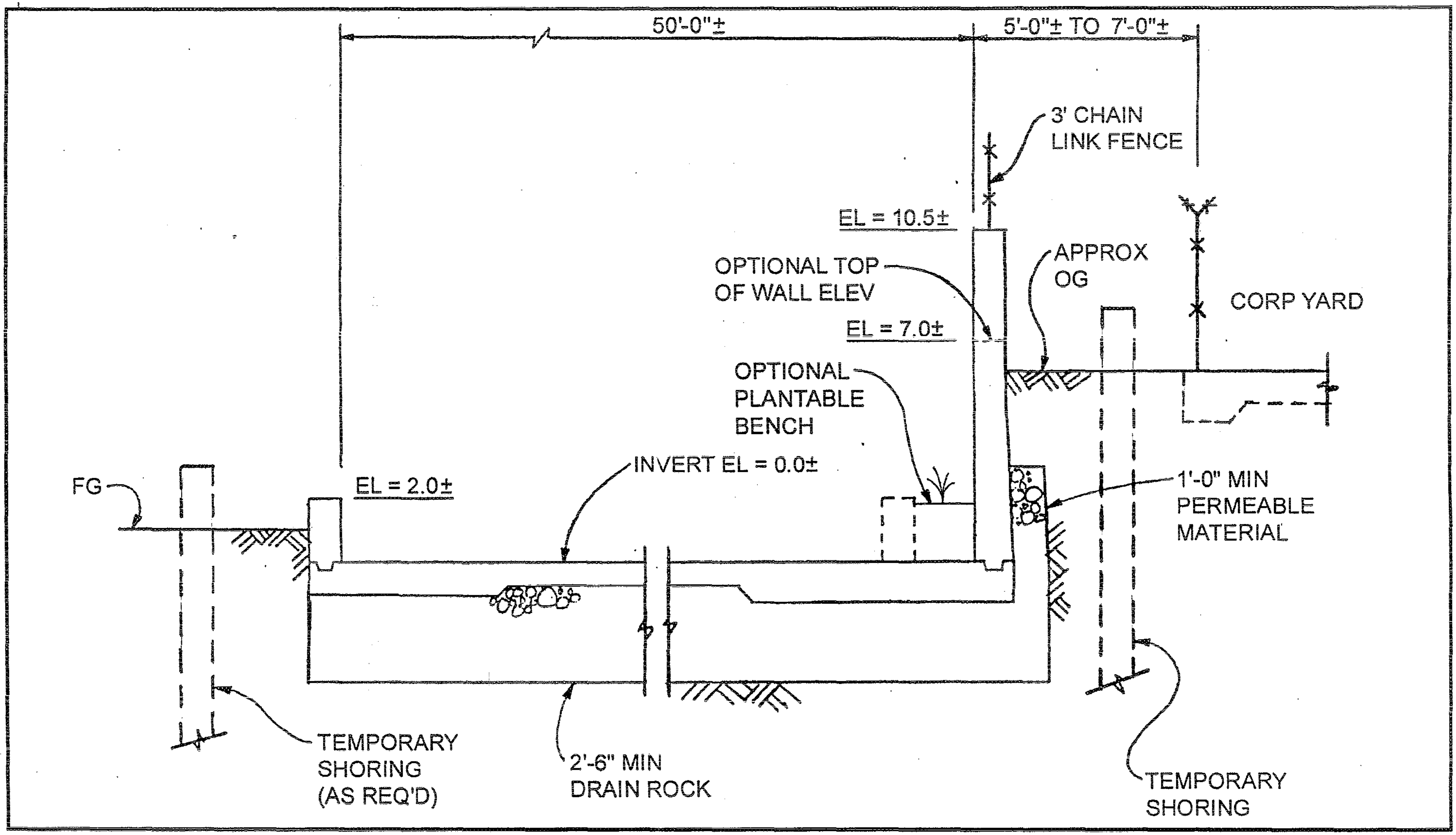
Reduction in required mitigation 0.1 X 3 = 0.3 Acre

Added mitigation area = 0.23 Acre
Net increase in available mitigation = 0.53 Acre

Downstream Alternative 4
Overflow Bypass Plan View

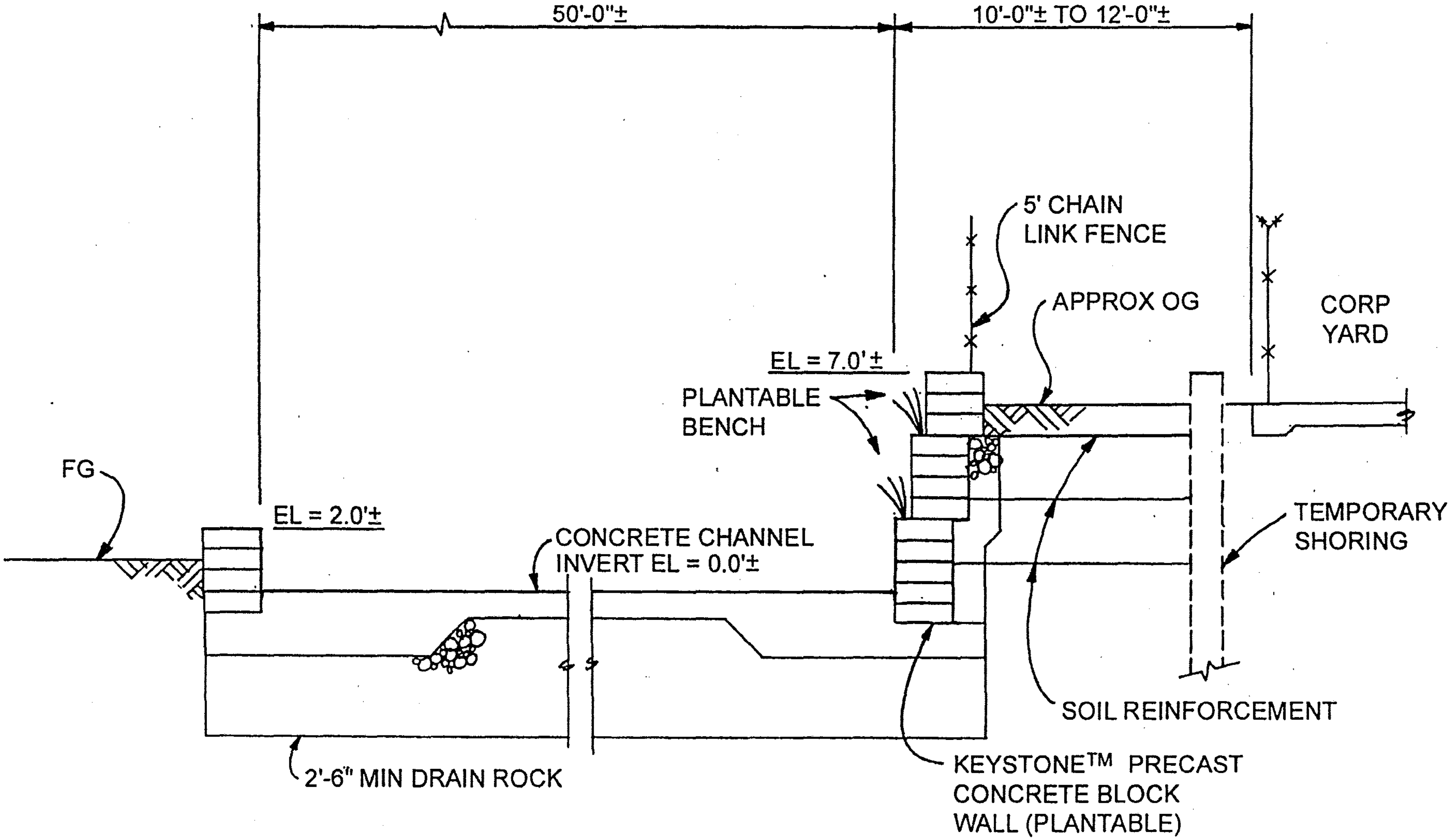
Scale: 1" = 300'

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS
100 N. WINCHESTER BLVD, STE. 200
SANTA CLARA, CA 95050
(408) 246-4848



CONCRETE LINED BYPASS

OVERFLOW BYPASS



BLOCK WALL LINED BYPASS

OVERFLOW BYPASS

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SUGGESTED WORK SCHEDULES

DPD-OSD-0037 (REV. 2/92)

PROJECT	CU	EA	COMPILED BY	DATE
MATADERO / BARRON CREEKS REMEDIATION PROJECT			A. NOTARO	03/14/00

District 04 County SCI Route Local Post Mile ______ Number of Days Allotted 100

Structure CONCRETE LINED BYPASS CHANNEL Bridge Number N/A

DESCRIPTION OF WORK	<--------------->				20 WORK				DAYS																															
MOBILIZATION	▨	▨																																						
CONSTRUCT TEMPORARY SHORING			▨	▨	▨	▨	▨	▨	▨																															
CONSTRUCT CHANNEL INVERT					▨	▨	▨	▨	▨	▨	▨																													
CONSTRUCT CHANNEL WALLS							▨	▨	▨	▨	▨	▨	▨																											
INSTALL FENCING														▨	▨																									
REMOVE SHORING																▨	▨	▨	▨																					
DEMOBILIZATION																				▨																				

Matadero Schedule.xls
7/30/01

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SUGGESTED WORK SCHEDULES

DPD-OSD-0037 (REV. 2/92)

PROJECT	CU	EA	COMPILED BY	DATE
MATADERO / BARRON CREEKS REMEDIATION PROJECT			A. NOTARO	03/14/00

District 04 County SCI Route Local Post Mile ____ Number of Days Allotted 90

Structure CONCRETE BLOCK LINED BYPASS CHANNEL Bridge Number N/A

DESCRIPTION OF WORK	<--------------->				20 WORK				DAYS																															
MOBILIZATION	▨	▨																																						
CONSTRUCT TEMPORARY SHORING			▨	▨	▨	▨	▨	▨	▨																															
CONSTRUCT CHANNEL WALLS						▨	▨	▨	▨	▨																														
INSTALL FENCING											▨	▨																												
REMOVE SHORING													▨	▨	▨	▨																								
DEMOBILIZATION																	▨																							

3. MATADERO CREEK
(Bayshore Freeway to Alma Street)

3. MATADERO CREEK (Bayshore Freeway to Alma Street)

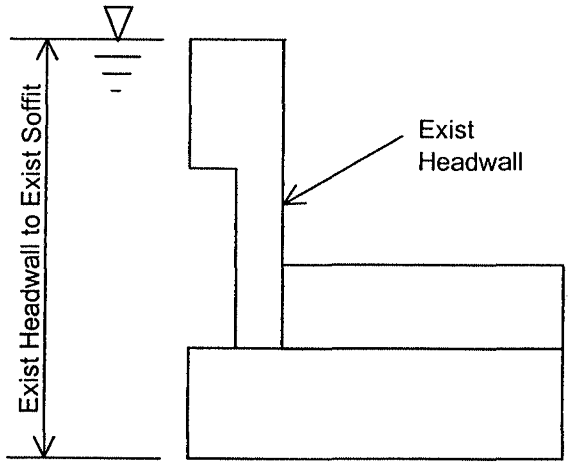
3.1 Bridge Replacement

Review of the "Matadero Creek Phase 1: Palo Alto Flood Basin to Middlefield Road" as-built project plans dated April 1, 1990 indicates that the Matadero Creek 1-percent flood flows will be pressurized as they pass through both the Greer Road and Louis Road Bridge Replacement sites. Both structures appear to have been designed with sufficient capacity to resist the buoyant forces resulting from the pressurized stream flows, if freeboard is neglected and only the 1-percent flood elevation is considered. However, design of structures for pressurized flows typically includes a maximum water surface elevation equal to the available freeboard to account for wave actions, obstructions, sedimentation and other variables that could cause actual water surfaces to exceed the anticipated 1-percent flood elevations. Revising the analysis and assuming that the design water surface includes the available freeboard (measured to the top of headwall or adjacent floodwall; whichever is lower), the Louis Road Bridge becomes significantly overstressed and the Ross, Middlefield and Cowper Bridges are marginally overstressed, as noted below:

EXISTING BRIDGE BUOYANCY INVESTIGATION
EXISTING CONDITION

BRIDGE	Headwall to Soffit (ft)		Demand/Capacity Ratio	REMARKS
	D/S	U/S		
BAYSHORE FWY	–	–	–	Out of scope
GREER	5.0 ±*	5.75 ±	0.28	OK
LOUIS	4.5 ±*	5.25 ±	2.38	Significantly overstressed
ROSS	2.5 ±*	2.5 ±*	1.04	Marginally overstressed
MIDDLEFIELD	2.75 ±	3.0 ±*	1.41	Marginally overstressed
COWPER	2.8 ±*	2.8 ±*	1.37	Marginally overstressed
WAVERLEY	1.0 ±*	1.0 ±*	0.07	OK

* Based on adjacent existing floodwall elevation, which is below top of existing headwall.



The following assumptions were included in this analysis:

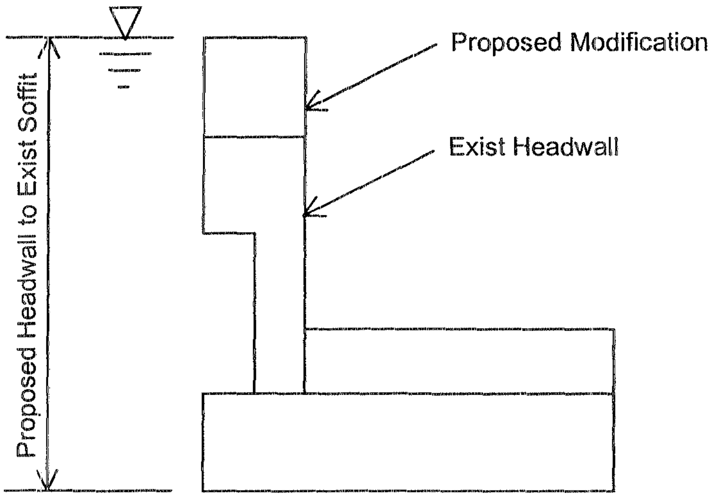
1. Buoyancy is carried by beam action of the structure
2. Buoyancy is applied as a uniform load
3. Critical structure demands are based on Group II loading in accordance with Table 3.22.1A factors for Load Factor Design of Caltrans Bridge Design Specifications (BDS) manual
4. Structure capacities are based on the slab capacity utilizing Load Factor Design per BDS

Based upon the severe backwater effects highlighted in the Preliminary Analysis section of this report, the 1-percent design flood elevation at the lower reach bridge structures were raised significantly from those shown in the 1990 as-built plans. The design flood elevation was raised approximately 2.0± to 2.5± feet at Greer Road Bridge, 2.5± to 3.0± feet at Louis Road Bridge, and 1.5± to 2.0± feet at Ross Road Bridge. Additionally, the full FEMA freeboard requirements required for floodplain remapping are typically 1.0± foot higher than provided in the as-built plans. Analysis based upon the revised 1-percent flood elevation with full FEMA freeboard provided by floodwall & headwall improvements as required at the bridges is summarized in the table below:

EXISTING BRIDGE BUOYANCY INVESTIGATION
RAISE FLOODWALL / HEADWALL (FULL FEMA FREEBOARD)

BRIDGE	Headwall to Soffit (ft)		Demand/Capacity Ratio	REMARKS
	D/S	U/S		
BAYSHORE FWY	–	–	–	Out of scope
GREER	8.25 ±	9.25 ±	0.70	OK
LOUIS	7.50 ±	9.30 ±	4.23	Significantly overstressed
ROSS	3.00 ±	5.60 ±	2.07	Significantly overstressed
MIDDLEFIELD	3.00 ±*	3.00 ±*	1.48	Marginally overstressed
COWPER	2.80 ±*	2.80 ±*	1.37	Marginally overstressed
WAVERLEY	1.00 ±*	6.00 ±	1.10	Marginally overstressed

* Based on adjacent proposed floodwall elevation, which is below top of proposed headwall.



The results of the pressurized flow analysis indicate that the Louis Road Bridge is significantly overstressed in both the existing and proposed channel configurations and should be replaced. The Ross Road Bridge is marginally overstressed under existing conditions and bordering on significantly overstressed after raising the floodwalls and headwalls, thus warranting further investigation.

3.1.1 Louis Road Bridge

The existing Louis Road Bridge is anticipated to be replaced in kind with a new prestressed concrete slab bridge with integral diaphragm abutments supported on piles (see Louis Road Bridge Replacement detail at the end of Section 3). The replacement of the Louis Road Bridge is proposed to occur on the same alignment and structural footprint as the existing structure. This alignment allows for the anticipated reuse of the existing Class 45C driven piles, subject to final geotechnical review and recommendations.

Due to existing site conditions, the proposed bridge profile will only be raised approximately 1'-0"± to avoid adversely impacting sight distances along Louis Road and local drainage patterns. Based on the revised bridge profile and hydraulic gradient, the proposed structure will still need to be designed for strength and stability under pressurized flows. At a minimum, the prestressed slab mild reinforcing steel (top and bottom mats) should be increased to resist the upward buoyant forces assuming a water surface elevation based on the 1-percent design flood water surface plus full FEMA freeboard.

The following construction issues will need to be addressed during replacement of the existing structure:

- The existing 4-inch gas line and 6-inch waterline will need to be protected and/or temporarily relocated during removal of the existing structure and construction of the replacement structure.
- The existing 60 kV underground electrical lines, existing telephone 21-inch steel casing and existing 15-inch VCP sanitary sewer line and manholes shall be protected during all construction operations (see Section 3.5 "Existing 60 kV Electrical Trench" for detailed discussion regarding the 60 kV electrical lines).
- Temporary road closures and traffic detours will be required. Anticipated vehicular and pedestrian detours include routing traffic to Greer Road and Ross Road via Loma Verde Avenue and Colorado Avenue.
- The bridge site is within a residential area and immediately adjacent to a local synagogue. Dust, noise and vibration impacts to the surrounding community should be minimized. Traffic ingress and egress needs to be maintained to local residences and the synagogue throughout construction.

The anticipated structural construction cost to replace this bridge is $210,000 ($85 per square foot). Costs include 10% for mobilization and a 20% contingency. The above cost estimate includes structural items of work only and does NOT include any costs associated with the following items:

- Traffic control and temporary detours
- Relocation / protection of existing utilities
- Roadway improvements beyond the bridge limits
- Providing pile foundations in addition to the existing piles
- Channel improvements (see Section 3.2)
- Temporary or permanent right-of-way acquisition
- Environmental mitigation
- Improvements of adjacent facilities / properties

The proposed bridge replacement is anticipated to require approximately 5 months to complete the major structural components of the existing bridge removal and replacement. This time frame does not include additional time for roadway approach work or channel improvements. In order to meet environmental approval, it is anticipated that all work within or affecting the creek channel will be required to be confined to the period between April 15 and October 15.

3.1.2 Ross Road Bridge

Refined analysis of the Ross Road Bridge (which accounted for the hydraulic effects of raising the Louis Road Bridge) indicates that the structure has the potential to be marginally overstressed when pressurized under 1-percent design flood plus full FEMA freeboard loading. Replacement of this structure is NOT recommended for the following reasons:

- Duration of pressurized loading is short term (±2 hours)
- Design loading condition with full FEMA freeboard applied on both the upstream and downstream headwalls is conservative
- Potential overstresses are localized and the existing structural system is integrated, allowing for redistribution of loads

The following additional mitigation measures could be implemented by the District to further reduce any potential risk to the existing structure:

- Acquire a FEMA exception to reduce the required freeboard at the bridge from 4.0 feet to 3.0 feet.
- Provide additional dead load to the structure in the form of an asphalt concrete overlay to the roadway surface. (A future AC overlay was provided for in the as-built design).
- Modify the existing trapezoidal shape channel below the existing bridge structure to a full U-frame channel (similar to proposed channel modification at Louis Road Bridge).

3.2 Channel Modification

In order to convey additional flow underneath the proposed Louis Road Bridge Replacement, the existing trapezoidal channel directly under the bridge is proposed to be replaced with a full U-frame channel section along the same alignment. The U-frame channel should match the existing channel width. Based on recommendations from Schaaf & Wheeler, a 40± foot long channel transition should be provided upstream, and a 20± foot long channel transition should be provided downstream of the bridge. The channel modifications adjacent to the bridge will also include replacement of any existing floodwalls impacted by the construction and extension of the existing fish passage channel throughout the new construction.

Construction of the proposed U-frame channel modification would consist of the following (see Typical Cross Section included at the end of Section 3):

1. Constructing temporary stream diversion around the construction zone. A temporary cofferdam and pump system is anticipated.
2. Constructing temporary shoring (soldier pile and lagging anticipated) along both banks of the existing channel to retain the side of the 13± foot deep excavations and to limit groundwater infiltration and facilitate dewatering during construction.
3. Installation of drain rock / bridging material overlaying geotextile stabilization fabric along the channel invert to facilitate dewatering and to provide a suitable working platform for the construction equipment.
4. Construction of a concrete invert slab. Thickness will vary.
5. Construction of concrete channel walls (and floodwall extensions) cantilevered from the invert slab. Walls will be backfilled with permeable material prior to removal of temporary shoring.
6. Removal of the temporary shoring.
7. Removal of temporary stream diversion.

Preliminary design assumptions include:

1. Ground water elevation at or near channel invert based on preliminary geotechnical investigation. Ground water is anticipated to infiltrate channel excavations.
2. Preliminary channel layout and sizing is based on a rigid and undrained wall system:

• Equivalent fluid pressure:	45 pcf
• Uniform pressure:	8H psf
• Add'l undrained pressure:	40 pcf (below water table)
• Surcharge:	2 feet level earth

3. Long-term buoyancy effects on the structure are assumed to be negligible. Water levels within the creek channel are not anticipated to be significantly below the ground water levels behind the channel walls.
4. Preliminary review focused primarily on the typical channel section. Special detailing and design will be required at the maintenance access ramp structure.

Excerpts from "A Structural Integrity Study for Permanente Creek Flood Control Project" have been included in Appendix A to provide the designer with general design recommendations to increase the expected life span of new concrete channel structures. The attached report excerpts include the Executive Summary and General Concrete Channel Design Recommendations from an extensive structural, geotechnical and materials testing study performed for the SCVWD on the existing channel structures along Permanente and Hale Creek in the Cities of Los Altos and Mountain View California.

The anticipated structural construction cost is $490,000 ($4,000± per linear foot). Costs include 10% for mobilization and a 25% contingency. Given the early stage in which this estimate has been generated and the uncertainty of the magnitude of dewatering that will be required, we feel that this contingency is appropriate. The above cost estimate includes structural items of work only and does NOT include any costs associated with the following items:

- Traffic control and temporary detours
- Relocation / protection of existing utilities
- Bridge replacement (see Section 3.1)
- Temporary or permanent right-of-way acquisition
- Environmental mitigation
- Improvements of adjacent facilities / properties

The proposed channel modification is anticipated to require approximately 3 months to complete the major structural components of work. This time frame does not include additional time for bridge replacement or maintenance access ramp modification. In order to meet environmental approval, it is anticipated that all work within or affecting the creek channel will be required to be confined to the period April 15 to October 15.

3.3 Floodwall Improvements

There are approximately 14,500± linear feet of existing floodwalls lining Matadero Creek between the existing Bayshore Freeway Bridge structures and the existing Alma Street Culvert. The as-built floodwalls are comprised of numerous wall types, materials and layout conditions. For purposes of this report, the as-built walls have been summarized into the following representative wall types:

Existing:	These as-built walls were NOT modified during the SCVWD Phase I improvements. No as-built data is currently available. The walls appear to be comprised of concrete masonry units on a cast-in-place concrete spread footing foundation. Total as-built length of wall type is approximately 260± lineal feet.
Modified:	These as-built walls were modified during the SCVWD Phase I improvements. The as-built walls consist of concrete masonry unit extensions of the existing wall type described above. No footing modifications were included. Total as-built length of wall type is approximately 1,040± lineal feet.
Type 1:	This wall type was included in the Phase I plans as Type I Floodwall. However, the modifications noted in the record drawings appear to replace this wall type with the Type III Floodwall also included in the Phase I plans. This wall type was not reviewed as part of this report.

Type 2:	These as-built walls were constructed during the SCVWD Phase I improvements as Type II Floodwall. The as-built wall consists of a 7"± thick cast-in-place wall doweled into the top of an existing concrete outfall structure. Total as-built length of wall type is approximately 56± lineal feet.
Type 3:	These as-built walls were constructed during the SCVWD Phase I improvements as Type III Floodwall. The as-built wall consists of an 8"± thick cast-in-place wall on a 2'-0"± by 2'-2"± wide cast-in-place spread footing. Top of footing equals top of existing channel lining. Record drawings indicate that this floodwall type was constructed in lieu of the Type I Floodwalls originally detailed in the plans. Total as-built length of wall type is approximately 6,400± lineal feet.
Type 4:	Not used.
Type 5:	These as-built walls were constructed during the SCVWD Phase I improvements as extensions of the channel lining constructed adjacent to the Greer Road Bridge. The as-built wall consists of a 7"± thick cast-in-place wall doweled into the thickened and flattened upper end of the concrete channel lining. Total as-built length of wall type is approximately 150± lineal feet.
Type 6:	These as-built walls were constructed during the SCVWD Phase II improvements upstream of the Middlefield Road Bridge. The as-built wall consists of a 9½"± thick cast-in-place wall on a 1'-0"± by 3'-9½"± wide cast-in-place spread footing. The footing is buried below the top of channel lining. Total as-built length of wall type is approximately 450± lineal feet.
Type 7:	These as-built walls were constructed during the SCVWD Phase II improvements, locations vary. The as-built wall consists of a 9½"± thick cast-in-place wall on a 1'-0"± by 2'-3½"± wide cast-in-place spread footing. The footing is buried below the top of channel lining. Total as-built length of wall type is approximately 4,200± lineal feet.
Type 8:	These as-built walls were constructed during both the SCVWD Phase I and II improvements as extensions of the channel, locations vary. The as-built wall consists of a 7"± thick cast-in-place wall extending vertically out of the 7"± thick sloping concrete channel lining. Total as-built length of wall type is approximately 1,980± lineal feet.

Based upon the revised hydraulic gradient and the severe backwater effects highlighted in the Preliminary Analysis section of this report, the 1-percent design flood elevation along Matadero Creek is significantly higher than the hydraulic gradient used for the Phase I and II as-built designs. As a result, approximately 13,700± linear feet (90 percent) of the floodwalls will need to be raised in order to provide the required FEMA & SCVWD freeboard above the revised 1-percent design water surface elevations.

Preliminary analysis of the as-built floodwalls indicates that the following modifications to the as-built floodwalls will be required (see Floodwall Summary Tables at the end of Section 3):

- 3,750± linear feet of floodwall can be raised without providing additional structural modifications to the as-built walls (see Raise Floodwall detail at the end of Section 3).
- 9,850± linear feet of floodwall will need to be replaced and/or strengthened (see Floodwall Replacement & Floodwall Buttress details at the end of Section 3).
- 120± linear feet of floodwall will be replaced as part of the proposed channel lining modifications at the Louis Road Bridge Replacement (see Channel Modifications detail at the end of Section 3).

The raised floodwall segments of the project are anticipated to consist of cast-in-place concrete wall extensions constructed directly on top of and doweled into the existing Type 7 and 8 Floodwalls.

The replaced or strengthened wall segments are anticipated to consist of one of the following three options:

1. Replace the existing floodwall with a cast-in-place concrete wall on spread footings along the existing alignment, similar to the existing Type 6 floodwall. This option is anticipated to require minor removal and replacement of portions of the existing channel lining.
2. Replace the existing floodwall with a cast-in-place concrete wall spanning horizontally between cast-in-place concrete pilaster extensions of cast-in-drilled-hole piling. This option is anticipated to be more expensive than the other two options but may prove to be the most suitable for locations where there is little construction clearance to the existing right-of-way or other obstructions (60 kV line, existing fencing, other utilities, etc).
3. Strengthen the existing floodwall by buttressing the existing wall with cast-in-place concrete pilaster extensions of cast-in-drilled-hole piling. This option will extend 2'-0"± or more behind the existing floodwalls, thus encroaching into the existing SCVWD maintenance roadway or right-of-ways located behind the existing walls.

See Section 3.2 Channel Modifications for descriptions of the floodwall replacements as part of the proposed U-frame channel modifications at Louis Road Bridge.

The anticipated structural construction cost for floodwall improvements is $3,400,000. Costs include 10% for mobilization and a 20% contingency. The above cost estimate includes structural items of work only and does NOT include any costs associated with the following items:

- Traffic control and temporary detours
- Relocation / protection of existing utilities
- Channel improvements (see Section 3.2)
- Headwall improvement (see Section 3.4)
- Temporary or permanent right-of-way acquisition
- Environmental mitigation

The proposed floodwall improvements are anticipated to require approximately 6 months to complete. This time frame does not include additional time for adjacent channel or headwall improvements. In order to meet environmental approval, it is anticipated that all work within or affecting the creek channel will be required to be confined to the period between April 15 and October 15. As a result, multiple crews and extended work hours may be required to complete the work within the allotted environmental construction window. However, if portions of the floodwall work are not anticipated to affect the creek channel or require equipment to be within the creek channel, the work could extend beyond the stated construction period.

Floodwall improvements should be constructed such that work on the north bank proceeds roughly in tandem with work on the south bank so that increased flood protection (or conversely increased flood risk) is not inadvertently provided prior to project completion.

3.4 Headwall Improvements

There are seven (7) bridge structures crossing Matadero Creek within the study limits of this report. As described in Section 3.2 Bridge Replacement, several of these structures are anticipated to experience pressurized flows during the 1-percent flood event, thus requiring extension of the existing headwalls to maintain the required FEMA freeboard levels. Raising of the existing headwalls is anticipated at the Greer Road, Ross Road and Waverley Street Bridges (see Headwall Summary Table at the end of Section 3). Headwall modifications at Louis Road Bridge will be included as part of the proposed bridge replacement.

The existing headwalls at these structures all consist of modified Caltrans Standard Type 26 Barriers with Caltrans Standard Tubular Handrailing. The proposed modifications (see Headwall Typical Section at the end of Section 3) would include:

- Removing the existing tubular handrailing
- Doweling into the top of the existing barrier
- Constructing cast-in-place concrete wall extensions

At the Greer Road Bridge the existing headwall has insufficient capacity for the increased hydraulic loading on the raised headwall. Strengthening or replacement of the existing headwall will be required. Raising and strengthening of the Greer Road headwall will include the items listed above and the following additional mitigation measures:

- Doweling into the existing reinforced concrete bridge deck slab
- Doweling into the face of the existing headwall
- Thickening the base of the existing headwall

The anticipated structural construction cost for headwall improvements is $40,000. Costs include 10% for mobilization and a 20% contingency. The above cost estimate includes structural items of work only and does NOT include any costs associated with the following items:

- Traffic control and temporary detours
- Relocation / protection of existing utilities
- Floodwall improvements (see Section 3.3)

The proposed headwall improvements are anticipated to require approximately 1 month to complete. This time frame does not include additional time for adjacent floodwall improvements. In order to meet environmental approval, it is anticipated that all work within or affecting the creek channel will be required to be confined to the period between April 15 and October 15. However, significant portions of the headwall work are not anticipated to affect the creek channel or require equipment to be within the creek channel, thus allowing work to extend beyond the stated construction period.

Non-permanent modifications were not reviewed in detail as part of this investigation. However, a potential mitigation alternative would be the use of seasonal closure panels consisting of prefabricated temporary planks that fit into permanent pilaster elements attached to the existing headwalls.

3.5 Maintenance Access Ramps

There are six (6) existing maintenance access ramps along Matadero Creek between Bayshore Freeway and Alma Street; three along the left (south bank) and three along the right (north) bank. Based upon the revised hydraulic gradient, these six maintenance access ramps must be modified to provide flood protection equivalent to the top of the proposed adjacent floodwall modifications. The anticipated additional flood protection required at each ramp is as follows:

- 2.5± feet at ramp upstream of Bayshore Freeway (left bank)
- 2.5± feet at ramp upstream of Bayshore Freeway (right bank)
- 3.0± feet at ramp downstream of Greer Road Bridge (left bank)
- 3.0± feet at ramp downstream of Greer Road Bridge (right bank)
- 3.0± feet at ramp downstream of Louis Road Bridge (right bank)
- 2.0± feet at ramp downstream of Middlefield Road Bridge (left bank)

Ramp modifications were NOT reviewed in detail as part of this investigation. However, two mitigation alternatives are listed below:

- The existing ramp can be reconstructed to rise to the same elevation as the proposed floodwalls. This will require both raising and lengthening the existing ramps unless steeper ramp slopes can be approved (existing ramp slopes range from 10% to 20%).
- The existing ramps can be provided with semi-permanent seasonal closure panels that can be temporarily opened / removed to provide maintenance access during non-flood conditions.

3.6 Existing 60 kV Electrical Trench

Two existing 60 kV underground high voltage power lines in steel conduits and surrounded by thermal sand backfill are located within the District right-of-way along the right (north) bank of Matadero Creek. The lines are maintained by Palo Alto Light and Power and enter the right-of-way approximately 600± feet upstream of Bayshore Freeway and continue parallel to the channel to Alma Street. The exact location of the 60 kV lines is unknown and should be verified in the field by the contractor prior to performing any work adjacent to the existing lines. All excavations to verify the existing 60 kV trench shall be done by hand methods only. Approximate locations of the existing lines are shown in the following SCVWD as-built plan sets:

- "Matadero Creek Phase I: Palo Alto Flood Basin to Middlefield Road" dated April 1, 1990
- "Matadero Creek Phase IIA: Middlefield Road to Alma Street" dated June 21, 1990

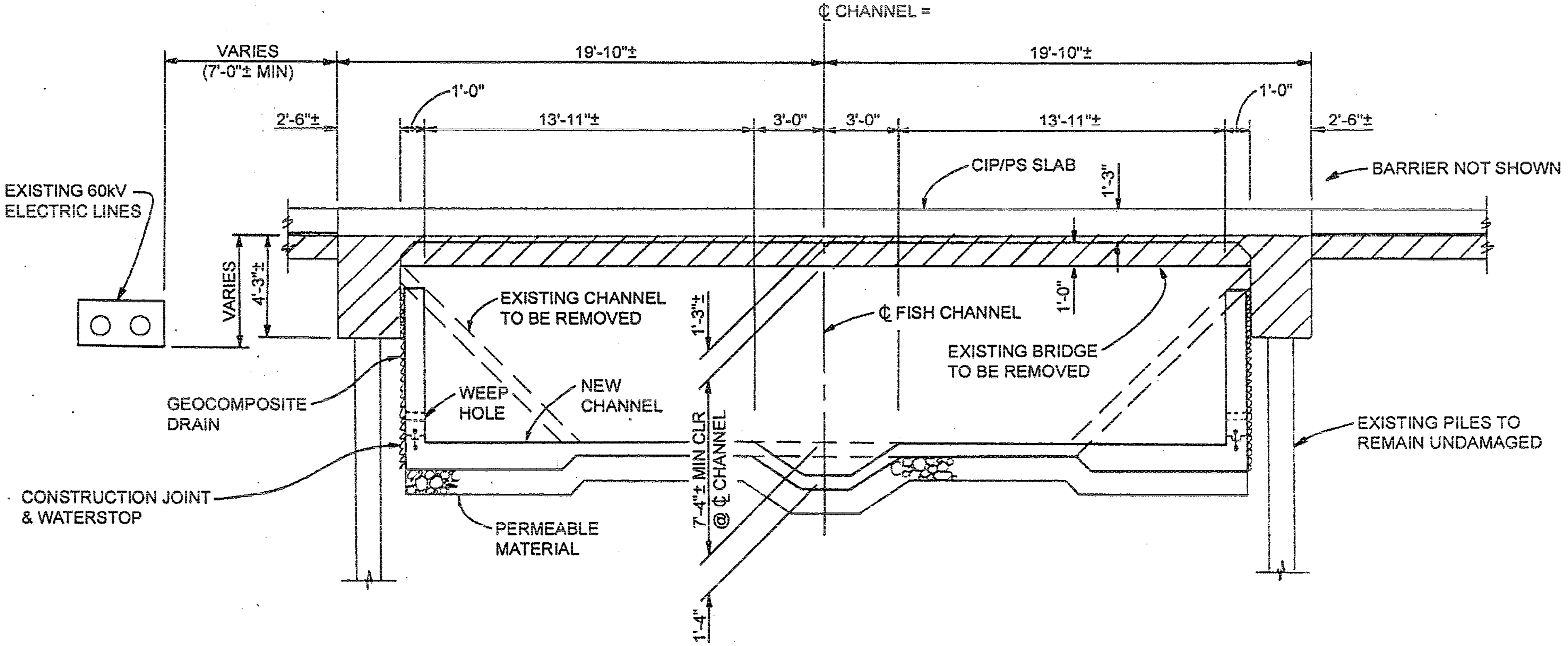
The existing 60 kV electrical lines are a high-risk utility and any construction impacts to the lines should be minimized. Temporary or permanent relocation of these specialized lines as part of this project is anticipated to be cost prohibitive. The following protective measures should be provided as a minimum:

- The edge of any permanent structure should not be constructed within 2'-0" of the edge of the existing 60 kV trench and thermal sand backfill.
- The edge of any part of temporary shoring or holes required for construction should not be within 2'-0" of the edge of the existing 60 kV trench and thermal sand backfill.
- Construction operations and methods should be selected that minimize vibrations and other potential impacts to the existing lines (example: use drilled piles in lieu of driven piles).

All planned construction operations within the vicinity of the existing 60 kV lines will need to be coordinated with Palo Alto Light and Power during final design.

3.7 Exhibits

- Louis Road Bridge Replacement
  - Typical Section
  - Suggested Work Schedule
- Channel Modification
  - Typical Section
  - Suggested Work Schedule
- Floodwall Improvements
  - Floodwall Summary Table
  - Floodwall Replacement Option Typical Section
  - Floodwall Replacement (Low Clearance) Option Typical Section
  - Floodwall Buttress Option Typical Section
  - Suggested Work Schedule
- Headwall Improvements
  - Headwall Summary Table
  - Headwall Typical Section
  - Suggested Work Schedule



LOUIS ROAD BRIDGE REPLACEMENT

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SUGGESTED WORK SCHEDULES

DPD-OSD-0037 (REV. 2/92)

PROJECT	CU	EA	COMPILED BY	DATE
MATADERO / BARRON CREEKS REMEDIATION PROJECT			A. NOTARO	02/22/00

District 04 County SCI Route Local Post Mile ______ Number of Days Allotted 95

Structure LOUIS ROAD BRIDGE Bridge Number N/A

DESCRIPTION OF WORK	<---------------->				20 WORK				DAYS																															
MOBILIZATION	▨	▨																																						
CONSTRUCT STREAM DIVERSION			▨																																					
REMOVE EXISTING BRIDGE				▨	▨																																			
CONSTRUCT ABUTMENTS						▨	▨	▨																																
CONSTRUCT SUPERSTRUCTURE									▨	▨	▨	▨	▨	▨	▨																									
CONSTRUCT BARRIERS																▨	▨																							
REMOVE STREAM DIVERSION																		▨																						
DEMOBILIZATION																			▨																					

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SUGGESTED WORK SCHEDULES

DPD-OSD-0037 (REV. 2/92)

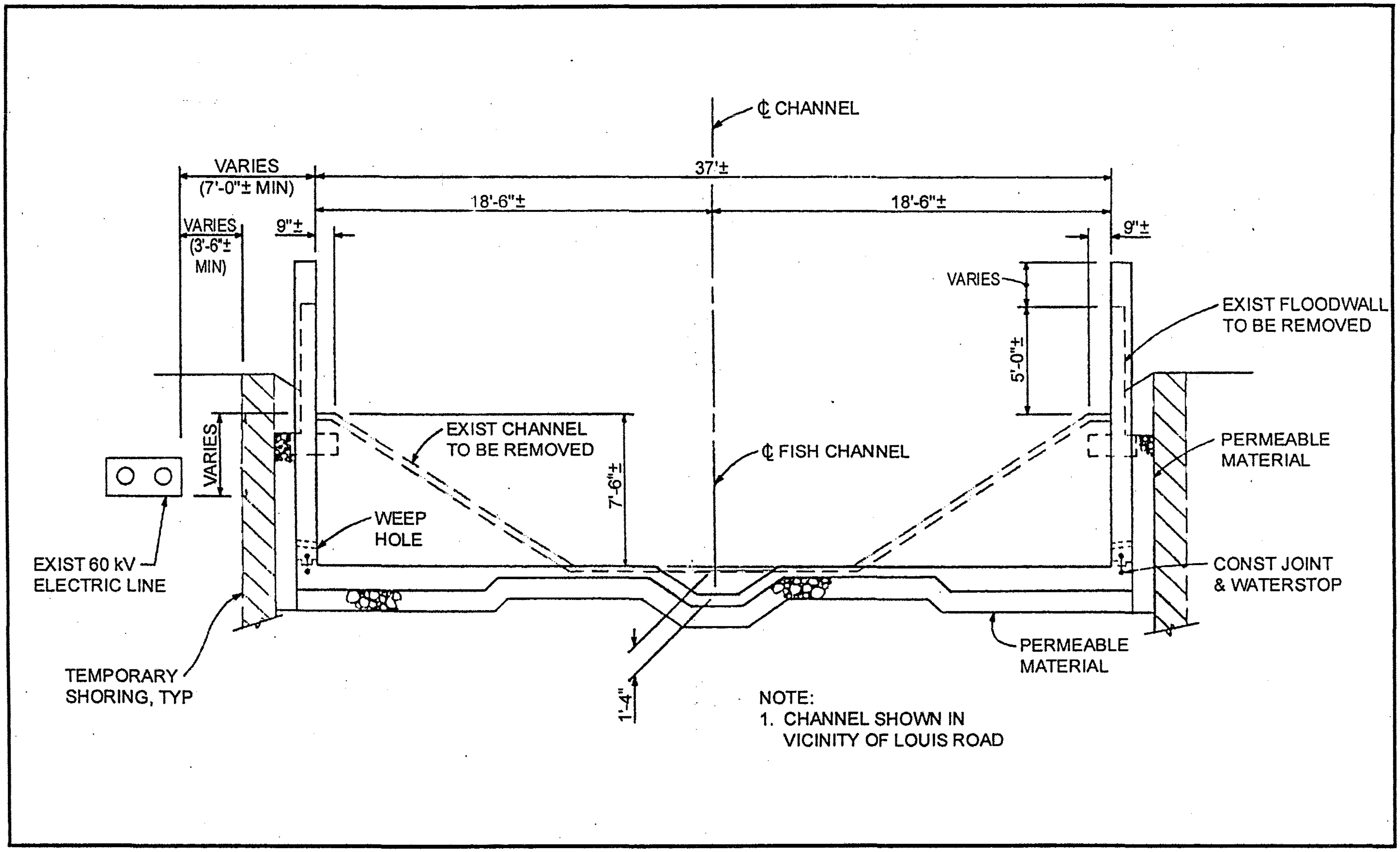
PROJECT: MATADERO / BARRON CREEKS REMEDIATION PROJECT
CU:
EA:
COMPILED BY: A. NOTARO
DATE: 02/22/00

District 04 County SCI Route Local Post Mile ______ Number of Days Allotted 60

Structure CHANNEL MODIFICATION Bridge Number N/A

DESCRIPTION OF WORK	<--------------->				20 WORK				DAYS																															
MOBILIZATION	▨	▨																																						
CONSTRUCT STREAM DIVERSION			▨																																					
CONSTRUCT TEMPORARY SHORING				▨	▨																																			
REMOVE EXISTING CHANNEL LINING						▨																																		
CONSTRUCT CHANNEL LINING							▨	▨																																
CONSTRUCT FLOODWALL EXTENSIONS									▨	▨																														
REMOVE STREAM DIVERSION											▨																													
DEMOBILIZATION												▨																												

Matadero Schedule.xls
7/30/01



CHANNEL MODIFICATIONS

FLOODWALL SUMMARY TABLE

Floodwall Modification (Right Bank)

Begin Station	End Station	Length (ft)	Wall Type	Top of Wall Elevation (ft)				Remarks
				Begin		End		
				Proposed	Existing	Proposed	Existing	
								Bayshore Fwy / Frontage Road
103+98	104+98	100	Modified	11.6	9.0	11.7	9.2	Buttress or replace floodwall
104+98	109+17	419	Modified	10.7	9.2	10.9	9.2	Buttress or replace floodwall
109+17	109+73	56	Type 2	10.9	9.2	10.9	9.2	Raise floodwall
109+73	111+69	196	Type 3	10.9	9.2	11.0	9.2	Raise floodwall
111+69	115+36	367	Modified	11.0	9.2	11.2	9.2	Buttress or replace floodwall
115+36	116+36	100	Modified	12.2	9.2	12.2	9.2	Buttress or replace floodwall
116+36	116+85	49	Bridge					Greer Road
116+85	117+44	59	Type 5	13.2	10.0	13.2	10.0	Buttress or replace floodwall
117+44	117+85	41	Type 3	12.2	10.0	12.2	10.0	Buttress or replace floodwall
117+85	125+61	776	Type 3	12.2	10.0	12.6	10.3	Buttress or replace floodwall
125+61	126+67	106	Type 8	12.6	10.3	12.6	10.4	Buttress or replace floodwall
126+67	127+47	80	Type 8	13.6	10.4	13.6	10.4	Buttress or replace floodwall
127+47	127+67	20	Type 8	13.6	10.4	13.6	10.4	U-frame channel
127+67	128+30	63	Bridge					Louis Road
128+30	128+52	22	Type 8	14.8	11.1	14.8	11.1	U-frame channel
128+52	128+70	18	Type 3	14.8	11.1	14.8	11.1	U-frame channel
128+70	129+30	60	Type 3	14.8	11.1	14.8	11.2	Buttress or replace floodwall
129+30	138+03	873	Type 3	13.8	11.2	14.0	13.0	Buttress or replace floodwall
138+03	138+76	73	Type 3	15	13.0	15.0	13.0	Buttress or replace floodwall
138+76	139+03	27	Type 8	15.0	13.0	15.0	13.0	Raise floodwall
139+03	139+67	64	Bridge					Ross Road
139+67	139+97	30	Type 8	16.5	13.4	16.5	13.5	Buttress or replace floodwall
139+97	143+67	370	Type 3	16.5	13.5	16.5	14.8	Buttress or replace floodwall
143+67	149+29	562	Type 3	16.5	14.8	18.0	16.2	Buttress or replace floodwall
149+29	150+29	100	Type 3	18	16.2	18.0	16.7	Buttress or replace floodwall
150+29	151+15	86	Bridge					Middlefield Road
151+15	151+46	31	Type 8	18.1	17.2	18.1	17.3	Raise floodwall
End Phase I plans (Sta 151+46) equals begin Phase II plans (Sta 143+00).								
143+00	146+00	300	Type 7	18.1	17.3	18.1	18.1	Raise floodwall
146+00	152+87	687	Type 7	18.1	18.1	19.0	19.0	No modification required
152+87	153+10	23	Type 8	19.0	19.0	19.7	19.7	No modification required
153+10	153+58	48	Bridge					Cowper Street
153+58	158+74	516	Type 8	21.8	19.8	22.2	20.0	Buttress or replace floodwall
158+74	159+46	72	Bridge					Waverly Street
159+46	160+46	100	Type 8	25.0	20.0	25.0	21.4	Buttress or replace floodwall
160+46	161+23	77	Type 8	24.0	21.4	24.0	22.5	Buttress or replace floodwall
161+23	165+68	445	Type 7	24.0	22.5	24.0	23.2	Raise floodwall
165+68	165+99	31	Bridge					Bryant Street Pedestrian Bridge
165+99	174+00	801	Type 7	23.5	23.5	25.5	25.5	Raise floodwall
174+00	175+43	143	Type 7	26	23.5	25.5	25.5	Raise floodwall

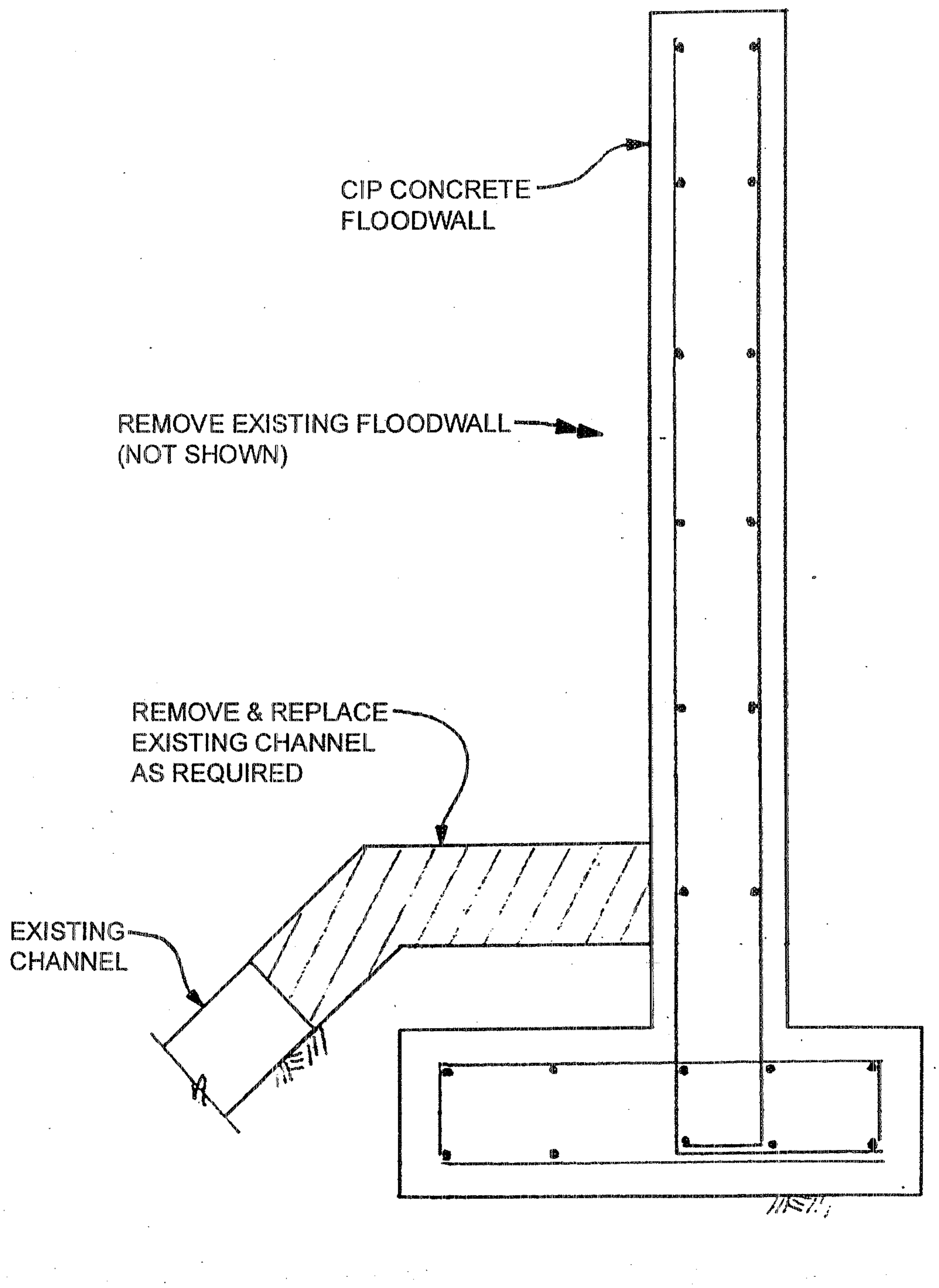
Total Length No Modification =	710 ft
Total Length Raise Floodwalls =	1999 ft
Total Length Buttress or Replace Floodwall =	4809 ft
Total Length U-frame Channel =	60 ft

FLOODWALL SUMMARY TABLE

Floodwall Modification (Left Bank)

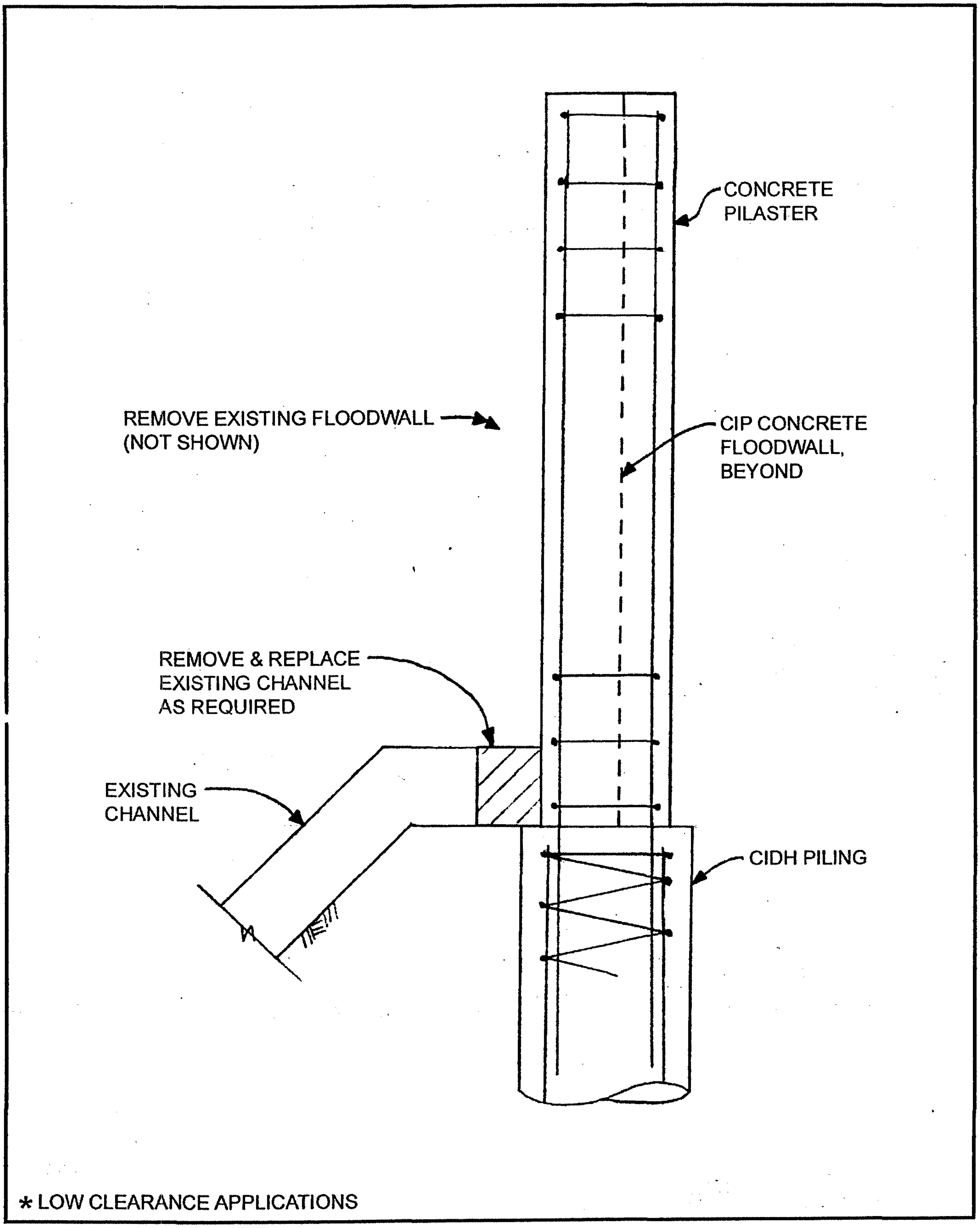
Begin Station	End Station	Length (ft)	Wall Type	Top of Wall Elevation (ft)				Remarks
				Begin		End		
				Proposed	Existing	Proposed	Existing	
								Bayshore Fwy / Frontage Road
103+98	104+98	100	Modified	11.6	9.0	11.7	9.2	Buttress or replace floodwall
104+98	109+73	475	Modified	10.7	9.2	10.9	9.3	Buttress or replace floodwall
109+73	115+32	559	Type 3	10.9	9.3	11.2	9.2	Buttress or replace floodwall
115+32	116+02	70	Type 3	12.2	9.2	12.2	9.2	Buttress or replace floodwall
116+02	116+32	30	Type 5	12.2	9.2	12.2	9.2	Buttress or replace floodwall
116+32	116+85	53	Bridge					Greer Road
116+85	117+44	59	Type 5	13.2	10.0	13.2	10.0	Buttress or replace floodwall
117+44	117+85	41	Type 3	13.2	10.0	13.2	10.0	Buttress or replace floodwall
117+85	125+07	722	Type 3	12.2	10.0	12.5	10.3	Buttress or replace floodwall
125+07	126+67	160	Exist	12.5	10.3	12.6	10.3	Buttress or replace floodwall
126+67	127+47	80	Exist	13.6	10.3	13.6	10.4	Buttress or replace floodwall
127+47	127+67	20	Exist	13.6	10.4	13.6	10.4	U-frame channel
127+67	128+30	63	Bridge					Louis Road
128+30	128+52	22	Type 8	14.8	11.1	14.8	11.1	U-frame channel
128+52	128+70	18	Type 3	14.8	11.1	14.8	11.1	U-frame channel
128+70	129+30	60	Type 3	14.8	11.1	14.8	11.2	Buttress or replace floodwall
129+30	138+03	873	Type 3	13.8	11.2	14.0	13.0	Buttress or replace floodwall
138+03	138+76	73	Type 8	15.0	13.0	15.0	13.0	Buttress or replace floodwall
138+76	139+03	27	Type 8	15.0	13.0	15.0	13.0	Raise floodwall
139+03	139+67	64	Bridge					Ross Road
139+67	139+97	30	Type 8	16.5	13.4	16.5	13.5	Buttress or replace floodwall
139+97	143+67	370	Type 3	16.5	13.5	16.5	14.8	Buttress or replace floodwall
143+67	149+19	552	Type 3	16.5	14.8	18.0	16.3	Buttress or replace floodwall
149+19	150+29	110	Type 8	18.0	16.3	18.0	16.7	Buttress or replace floodwall
150+29	151+15	86	Bridge					Middlefield Road
151+15	151+46	31	Type 8	18.1	17.2	18.1	17.3	Raise floodwall
End Phase I plans (Sta 151+46) equals begin Phase II plans (Sta 143+00).								
143+00	146+00	300	Type 6	18.1	17.3	18.1	18.1	Raise floodwall
146+00	147+47	147	Type 6	18.1	18.1	18.1	18.1	No modification required
147+47	152+87	540	Type 7	18.1	18.1	19.0	19.0	No modification required
152+87	153+10	23	Type 8	19.0	19.0	19.7	19.7	No modification required
153+10	153+58	48	Bridge					Cowper Street
153+58	158+74	516	Type 8	19.8	21.8	20.0	22.2	Buttress or replace floodwall
158+74	159+46	72	Bridge					Waverly Street
159+46	160+46	100	Type 8	25.0	20.0	25.0	21.4	Buttress or replace floodwall
160+46	161+23	77	Type 8	24.0	21.4	24.0	22.5	Buttress or replace floodwall
161+23	165+68	445	Type 7	24.0	22.5	24.0	23.2	Raise floodwall
165+68	165+99	31	Bridge					Bryant Street Pedestrian Bridge
165+99	174+00	801	Type 7	24	23.5	26.0	24.8	Raise floodwall
174+00	175+43	143	Type 7	26	24.8	26.0	25.5	Raise floodwall

Total Length No Modification =	710 ft
Total Length Raise Floodwalls =	1747 ft
Total Length Buttress or Replace Floodwall =	5057 ft
Total Length U-frame Channel =	60 ft



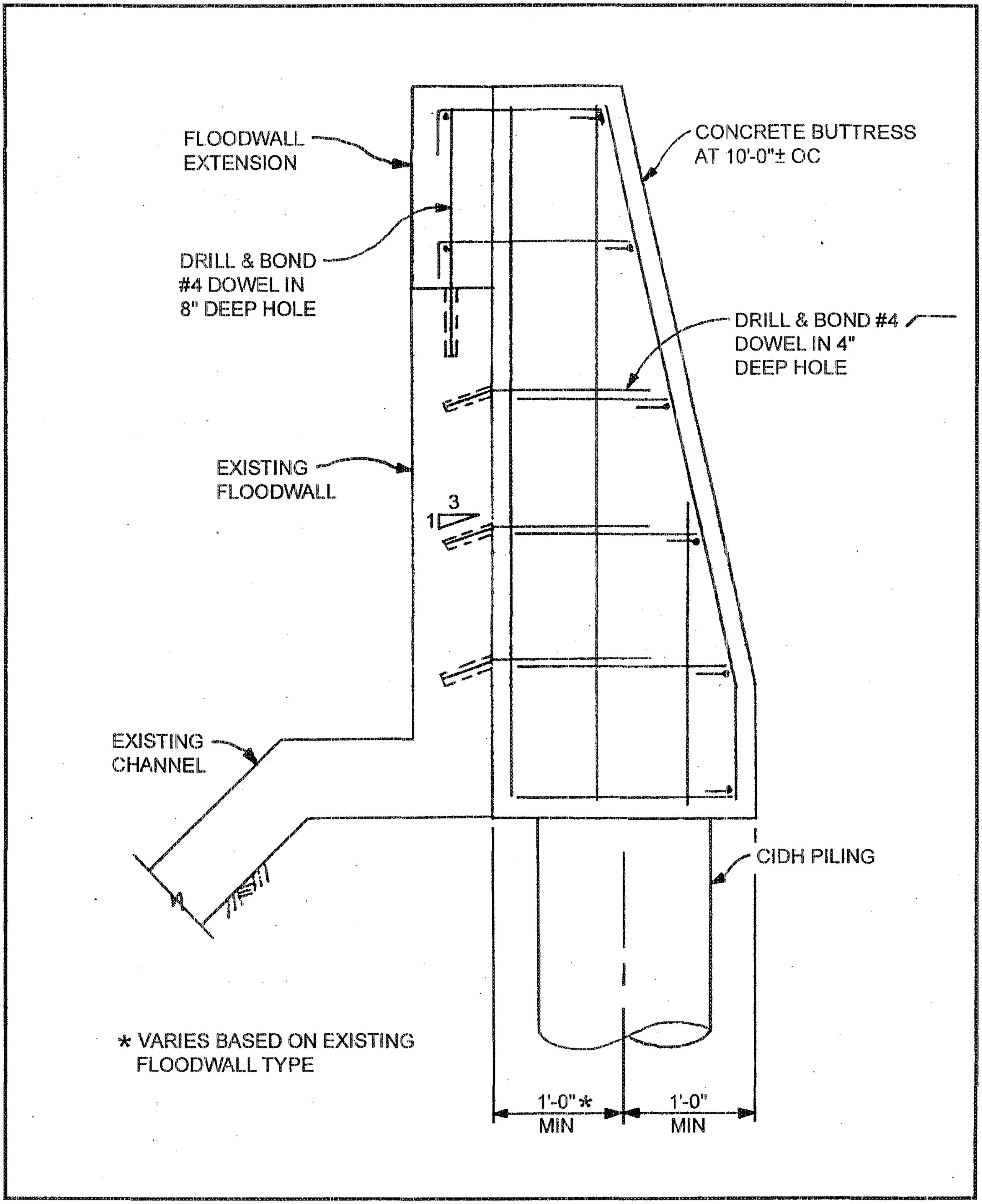
CIP CONCRETE FLOODWALL
REMOVE EXISTING FLOODWALL (NOT SHOWN)
REMOVE & REPLACE EXISTING CHANNEL AS REQUIRED
EXISTING CHANNEL

FLOODWALL REPLACEMENT



CONCRETE PILASTER
REMOVE EXISTING FLOODWALL (NOT SHOWN)
CIP CONCRETE FLOODWALL, BEYOND
REMOVE & REPLACE EXISTING CHANNEL AS REQUIRED
EXISTING CHANNEL
CIDH PILING
* LOW CLEARANCE APPLICATIONS

FLOODWALL REPLACEMENT*


FLOODWALL EXTENSION
CONCRETE BUTTRESS AT 10'-0"± OC
DRILL & BOND #4 DOWEL IN 8" DEEP HOLE
DRILL & BOND #4 DOWEL IN 4" DEEP HOLE
EXISTING FLOODWALL
3
1
EXISTING CHANNEL
CIDH PILING
* VARIES BASED ON EXISTING FLOODWALL TYPE
1'-0"* MIN
1'-0" MIN

FLOODWALL BUTTRESS

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SUGGESTED WORK SCHEDULES

DPD-OSD-0037 (REV. 2/92)

PROJECT	CU	EA	COMPILED BY	DATE
MATADERO / BARRON CREEKS REMEDIATION PROJECT			A. NOTARO	03/14/00

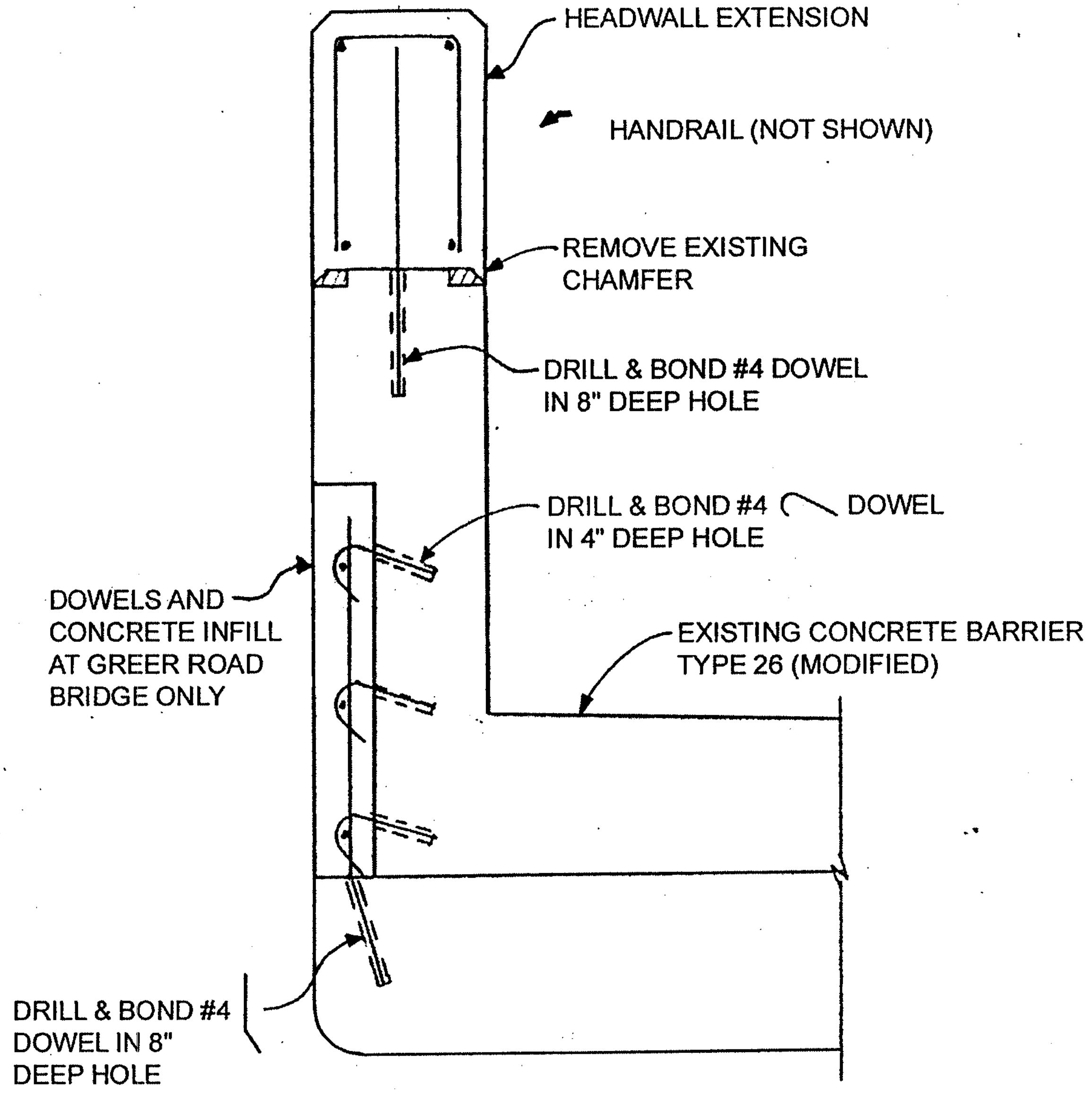
District 04 County SCI Route Local Post Mile _____ Number of Days Allotted 75/85/65 (PER 1000 FT LENGTH)

Structure FLOODWALL MITIGATION (PER 1000 FEET) Bridge Number N/A

DESCRIPTION OF WORK	<---------------->				20 WORK				DAYS																															
FLOODWALL REPLACEMENT																																								
MOBILIZATION	▨																																							
REMOVE EXISTING FLOODWALL		▨	▨	▨	▨																																			
CONSTRUCT FOUNDATION			▨	▨	▨	▨	▨																																	
CONSTRUCT FLOODWALL					▨	▨	▨	▨	▨	▨	▨	▨																												
REPAIR EXISTING CHANNEL (AS REQ'D)													▨	▨																										
DEMOBILIZATION															▨																									
FLOODWALL REPLACEMENT (LOW CLEARANCE)																																								
MOBILIZATION	▨																																							
REMOVE EXISTING FLOODWALL		▨	▨	▨	▨																																			
CONSTRUCT CIDH PILING			▨	▨	▨	▨	▨																																	
CONSTRUCT PILASTER & FLOODWALL					▨	▨	▨	▨	▨	▨	▨	▨	▨	▨																										
REPAIR EXISTING CHANNEL (AS REQ'D)															▨	▨																								
DEMOBILIZATION																	▨																							
STRENGTHEN FLOODWALL	▨																																							
MOBILIZATION		▨	▨	▨	▨	▨																																		
CONSTRUCT CIDH PILING				▨	▨	▨	▨																																	
CONSTRUCT FLOODWALL EXTENSION					▨	▨	▨	▨	▨	▨	▨	▨																												
CONSTRUCT BUTTRESS													▨																											
DEMOBILIZATION																																								

HEADWALL SUMMARY TABLE

BRIDGE	TOP OF WALL TO SOFFIT (FT)				REMARKS
	DOWNSTREAM		UPSTREAM		
	PROPOSED	EXISTING	PROPOSED	EXISTING	
BAYSHORE FWY	--	--	--	--	Out of scope
GREER	8.0 ±	5.8 ±	9.0 ±	5.8 ±	
LOUIS	6.7 ±	N / A	7.8 ±	N / A	Bridge replacement
ROSS	4.5 ±	4.5 ±	5.5 ±	4.5 ±	
MIDDLEFIELD	4.5 ±	4.5 ±	4.5 ±	4.5 ±	No modification required
COWPER	4.5 ±	4.5 ±	4.5 ±	4.5 ±	No modification required
WAVERLEY	4.4 ±	4.4 ±	6.0 ±	4.4 ±	
BRYANT	0.9 ±	0.0 ±	0.5 ±	0.5 ±	No modification required


HEADWALL EXTENSION
HANDRAIL (NOT SHOWN)
REMOVE EXISTING CHAMFER
DRILL & BOND #4 DOWEL IN 8" DEEP HOLE
DRILL & BOND #4 DOWEL IN 4" DEEP HOLE
DOWELS AND CONCRETE INFILL AT GREER ROAD BRIDGE ONLY
EXISTING CONCRETE BARRIER TYPE 26 (MODIFIED)
DRILL & BOND #4 DOWEL IN 8" DEEP HOLE

HEADWALL TYPICAL SECTION

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SUGGESTED WORK SCHEDULES

DPD-OSD-0037 (REV. 2/92)

PROJECT	CU	EA	COMPILED BY	DATE
MATADERO / BARRON CREEKS REMEDIATION PROJECT			A. NOTARO	02/22/00

District 04 County SCI Route Local Post Mile ______ Number of Days Allotted 25/20 PER BRIDGE

Structure HEADWALL MODIFICATION Bridge Number N/A

DESCRIPTION OF WORK	<-------------->				20 WORK				DAYS																															
GREER ROAD BRIDGE																																								
MOBILIZATION	▨																																							
STRENGTHEN EXISTING BARRIER		▨	▨	▨																																				
RAISE HEADWALL			▨	▨																																				
DEMOBILIZATION					▨																																			
ROSS / WAVERLEY BRIDGES																																								
MOBILIZATION	▨																																							
RAISE HEADWALL		▨	▨																																					
DEMOBILIZATION				▨																																				

4. BARRON CREEK

4. BARRON CREEK

4.1 General

No structural improvements were identified along this creek.

APPENDIX A

(Excerpts from "A Structural Integrity Study for Permanente Creek Flood Control Project")

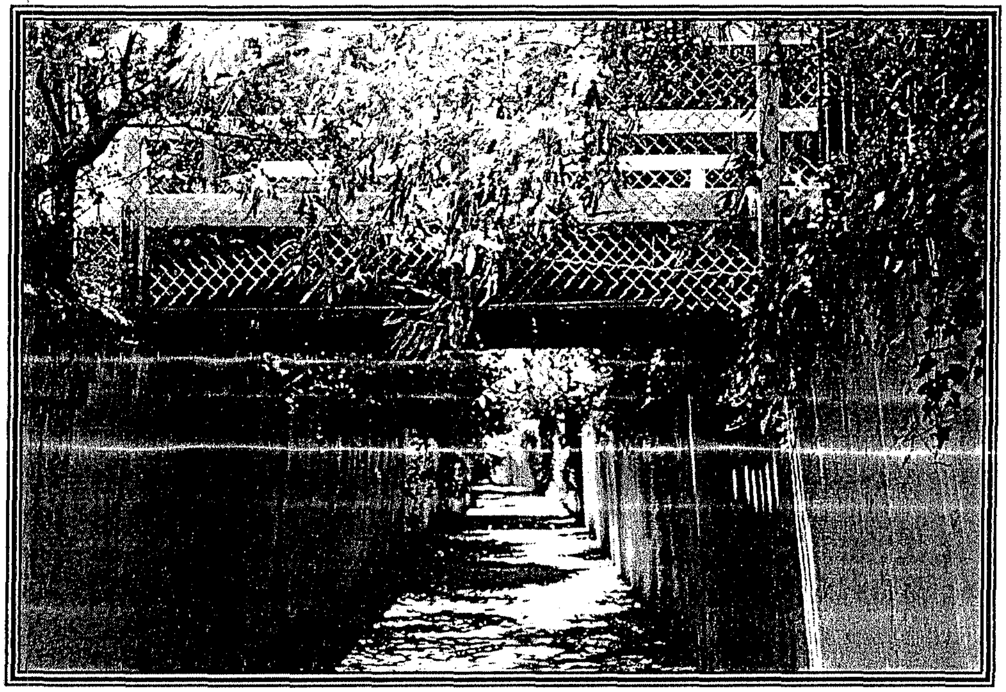
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS

1871 The Alameda, Suite 200
San Jose, California 95126
Telephone 408-296-5515

A Structural Integrity Study for

Permanente Creek Flood Control Project

Los Altos and Mountain View, California



Prepared for:
Santa Clara Valley Water District

Prepared by:
Biggs Cardosa Associates, Inc.

Project No.:
1999 029

Issued:
February 7, 2000

Biggs Cardosa Associates, Inc. • Parikh Consultants, Inc. • MacKay and Somps Civil Engineering

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III. Materials Testing Program 12

IV. Discussion of Findings 17

V. General Concrete Channel Design Recommendations 32

VI. Channel Repair Recommendations, Prioritization, and Cost Estimates 36

VII. APPENDIX – A: Site Inspection Documents

- Site Inspection Procedure Guide
- Site Inspection – Equipment Check List
- Blank Site Inspection Forms (A through H)

VIII. APPENDIX – B: Site Investigation Summary Reports

IX. APPENDIX – C: Summary Maps

- Concrete Cracks Summary Map
- Surface Defects Summary Map
- Exposed Reinforcement Summary Map
- Structural Deformation Summary Map
- Materials Testing Summary Map
- Structural Integrity Summary Map

X. APPENDIX – D: Materials Testing Reports

- Soil and Water Corrositivity
- Ground Penetrating Radar (GPR) Test Report
- Core Sample Test Results
- Schmidt Hammer Test Results & Correlation Table
- Pacometer Test Results
- Half Cell Potential Test Results
- Log of Test Borings

XI. APPENDIX – E: Records of Telephone Conversations Survey

XII. SUPPLEMENT No.1: Photograph Log & Album

XIII. SUPPLEMENT N0.2: Site Inspection Forms

XIV. PERMANENTE CREEK FLOOD CONTROL PROJECT STRUCTURAL INTEGRITY STUDY

Advisory Committee Summary Report

March 14, 2000

I. EXECUTIVE SUMMARY

➢ Introduction

This report presents the results of our structural and geotechnical engineering investigations for the structural integrity study of the concrete channel structures. These structures are located along the Permanente Creek Food Control Project in the cities of Los Altos and Mountain View, Santa Clara County, California.

Our work was performed in general accordance, with the scope of work as per our agreement with the Santa Clara Valley Water District. Our recommendations in this report are based on as-built data, site investigations, geotechnical investigations, material testing data, and standard engineering practice. Due to the inherent limitations in site investigations, geotechnical investigations and materials testing, it is neither uncommon to encounter unforeseen variations in conditions along the alignment nor is it practical to determine all such variations during an acceptable program of testing and investigation for a project of this scope. Such variations, when encountered, generally require additional engineering services to attain a reasonable explanation and resolution.

➢ Phase I – Data Collection

Phase I – Data Collection of this project includes the development of evaluation criteria and the collection of the available as-built plans and reports for review.

As a precondition to the development of the criteria, Biggs Cardosa Associates, Inc. had researched numerous county, state and federal agencies to determine if pre-existing evaluation criteria for channel structures has currently been implemented elsewhere in the nation (see Table 1 – Summary of Telephone Survey). The research concluded that, currently, there were no formal evaluation criteria being implemented for channel structures. Most agencies simply reconstructed the channel structure segments as their operation and maintenance personnel discovered the deteriorated channel segments. Most agencies had indicated that their channels, which were reaching the end of their 50 to 60 year life expectancies, were incurring substantial deterioration.

The channel evaluation criteria included a visual site-inspection program and a materials-testing program. Biggs Cardosa Associates, Inc. has developed a procedures guide, a complete set of inspection forms, and an equipment checklist to facilitate the visual site-inspection program (see Appendix-A: Site Inspection Documents). The materials-testing program includes tests for concrete strength, concrete cover, rebar location, rebar corrosion, concrete and soil corrosiveness, foundation soil cavities, soil type, and soil design parameters. Results of these tests were used to verify as-built conditions and help determine specific deficiency patterns.

Table 1 - Summary of Telephone Survey

Agency	Contact	Phone	Summary
Alameda County Flood Control	John Tejano	510.670.5512	No formal review criteria. All lined channels built by County.
APWA	Stephanie Osborn	202.393.2792	No formal review criteria
ASCE	Brian Parsons, Water Resources Dept	800.548.2723.4.6071	ASCE is not involved in review
Contra Costa County Flood Control	Dean Eckerson, Director Greg Connaughton, Maintenance Aileen Doten, Admin Services	925.313.2271 925.313.7002 925.313.2305	No formal review criteria
Fresno Irrigation District	Thad Betner	555.233.7161x19	No formal review criteria
Fresno Metropolitan Flood Control District and State Association of Flood Control Agencies	Doug Harrison	559.456.3292	No formal review criteria
Los Angeles County Department of Public Works	Jim Noyes Chief Deputy Director Gary Hartley, Deputy Director Brian Sasaki Deputy Director Flood Maintenance Ken Erhard Assistant Deputy Director Flood Maintenance Richard Seidon, O&M	626.458.4002 - 626.458.4008 626.458.4145 818.896.0594	No formal review criteria for structural condition. There are formal criteria for O&M. The County is currently reviewing its O&M procedures, and declined to disclose their current criteria. Channels greater than fifty years old have reached the end of their service life.
Modesto Irrigation District	Ed Tobias	209.526.7637	No formal review criteria
San Diego County	Kent Burnham	619.874.4084	No formal review criteria
Santa Barbara County Flood Control	Larry Faucet, Supervisor of O&M	805.568.3437	No formal review criteria. Channels originally built by the Soil Conservation Service are reaching the end of their service life.
Ventura County Department of Public Works	Hugh Clabaugh Kevin Keivanfar	805.654.2016 805.654.2906	No formal review criteria. Trapezoidal channels were destroyed by the earthquake. They are being replaced by rectangular channels.
US Army Corps of Engineers	Jim Sander, Construction Operations	916.557.5275	No formal review criteria
USDA – Natural Resource Conservation Service	Charles Davis Bill Ward	530.792.5622 530.792.5616	No formal review criteria. Local agencies write reports of reviews, and submit to NRCS.

- **Phase II – Field Inspection and Sampling**

Phase II– Field Inspection and Sampling included several comprehensive site inspections by a team of structural and geotechnical engineers to survey and test the conditions and obtain valuable field information for which the analytical study can be developed. The complete alignment had been thoroughly assessed, sampled and documented during the inspection and testing walk-throughs by our engineers. Site-inspection forms, corresponding photo logs, and the material test results were compiled and became the foundation of the Site Investigation Summary Reports (See Supplement No.1 – Photo Log & Album and Supplement No.2 – Site Inspection Forms). The findings were graphically summarized and plotted onto several summary maps to effectively present the information (See Appendix C – Summary Maps).

In general, the worst channel deterioration occurred along Hale Creek in the forms of excessive wall deflection, exposed and corroded rebar, concrete cracks and surface defects. The Permanente Diversion currently exhibits significant concrete cracking along its entire length, and the upper 700-meters of Permanente Creek near the Hale Creek confluence point also exhibits troubling excessive wall deflections and concrete cracks.

The soil type along Permanente Creek and Permanente Diversion was categorized as clays, which were consistent with the clogged weep holes, found in those segments. The soil type along Hale Creek was categorized as sandy, which gives this segment the potential for soil cavities beneath and behind the channel structure. This finding is consistent with the ground penetrating radar tests, which did indicate possible cavities or pocket of sandy/gravely lenses saturated with water beneath the invert of the Hale Creek segments.

The tested concrete strength ranged from 4000-psi to 8000-psi but was always above the assumed design value of approximately 3000-psi. These higher concrete strengths are typical and expected in aged concrete specimens. The soil corositivity test results indicate that the surrounding soil and water was not significantly corrosive.

- **Phase III – Evaluation and Recommendations**

Phase III– Evaluation and Recommendations includes as-built analysis of the channel structures, a comprehensive evaluation of degradation patterns, formulation of the causes of these exposed deficiencies and recommendations for repair. After completing a thorough inventory of the degradation and evaluating the site conditions, Biggs Cardosa Associates, Inc. has determined that there are seven consistent channel deficiency patterns of concern, which accounts for the causes of most of the documented degradation.

The seven channel deficiency patterns are recapitulated in an order of concern as follows: (See Section IV – Discussion of Finding for sketches and an expanded version of explanations).

1. **Excessive Wall Deflections** – Flexural cracks due to underestimated design loads and insufficient bar development along with the construction joint at the base of the wall allows moisture to corrode the main reinforcing steel reducing the wall capacity. The reduced wall capacity leads to excessive wall deflections and eventual collapse.

2. **Longitudinal Cracking of the Invert** – Underestimated design loads along with insufficient extension of the flexural reinforcing into the invert contribute to the flexural failure in the invert and the formation of a longitudinal crack and rotation of the wall. Moisture eventually penetrates through the crack corroding the nominal invert reinforcing which happens to be doweling the rotated wall portion to the invert slab preventing collapse. Complete deterioration of this invert reinforcing will lead to further wall rotation and the collapse of the wall.

3. **Trapezoidal Channel Lining Deterioration** – The light reinforcing and thin wall sections specified in the as-built plans of the trapezoidal channel structures indicates that they were not designed for any significant lateral earth loads. The walls are apparently seeing some significant lateral earth pressure, which are causing horizontal flexural cracks in approximately the middle of the wall. Along with a pattern of vertical cracking due to temperature expansion, these cracks are allowing for corrosion and expansion of the reinforcing, eventually delaminating and spalling the channel face of the concrete lining.

4. **Vertical Temperature Expansion and Contraction Crack in Walls** – Minimal longitudinal wall reinforcing and the channel structure geometry appears conducive to the formation of significant vertical temperature expansion cracking in the walls. These cracks in the channel structure, where water is often abundant, allow for moisture penetration, corrosion of the reinforcing, concrete efflorescence, weakening of the concrete section, and further wall cracking.

5. **Spillage of Backfill and Foundation Material Through Weephole and Gaps** – Deterioration of the weephole screens due to weathering allows for the erosion of backfill and foundation material and formation of voids and sink hole at sandy type backfill locations. The loss of the screens also allows for weephole clogging and possible additional hydrostatic loads on the wall at clayey type backfill location. Unaccounted additional hydrostatic wall pressure may lead to Deficiency Number 1 – Excessive Wall Deflections.

6. **Exposed Reinforcement Due to Lack of Concrete Cover** – Insufficient concrete cover due to poor construction quality control enables weathering to easily spall off portions of the concrete cover. The exposed reinforcing corrodes, expands and eventually further spalls more concrete cover.

7. **Wall Expansion Joint Deterioration** – Deterioration of the expansion joint material due to time and weathering causes a vertical gap in the wall, which enables sandy backfill material to sift through the wall and produce soil cavities and sinkholes. The gap also catches debris that over time abrades and spalls off the concrete at the joint, exposing and corroding the reinforcing causing further

spalling of the concrete. Seismic movements at the joint may also cause pounding and contribute to the spalled concrete or a larger gap opening.

To effectively summarize and present these findings, the aforementioned deficiency pattern descriptions and the locations of where these seven deficiency patterns occurred were plotted on the Structural Integrity Summary Map (See Appendix – C: Summary Maps).

With all of the deficiency patterns and their underlying causes identified, Biggs Cardosa Associates, Inc. developed recommendations for two possible scenarios; replacement and repair. General design recommendations for replacement designs were developed to address a baseline replacement option, and specific retrofit alternatives were developed for the deficiency patterns that could be addressed with a cost-effective repair to the existing structure.

Although the general design recommendations were developed to provide guidelines for the design of the replacement sections, these recommendations should also apply to new, future channel structure designs. The recommendations in Section V – General Concrete Channel Design Recommendations are meant to mitigate the degradation that was observed along the Permanente & Hale Creek alignment and should increase the expected life span of new channel structures significantly.

The most significant general design recommendation addressed the excessive wall deflection deficiency pattern, which prematurely failed portions of the Permanente and Hale Creek U-walls. The recommendation included an additional design step ensuring that the wall yield deflection is at least greater than the wall deflection required to achieve the typically assumed design active earth pressure. Other design recommendations include checking details such as wall reinforcement development length into the invert slab and providing for a continuous bottom mat of reinforcement in the invert slab.

Section V – General Concrete Channel Design Recommendations, also includes recommendations that are not necessarily required by the code but Biggs Cardosa Associates, Inc. believes are specifically advisable for channel structures. These include such recommendations as using epoxy coated rebar for all channel structures where reinforcing is likely to be exposed to significantly more moisture during the lifetime of the structure, and specifically designing for temperature reinforcement in lieu of using the code minimum temperature reinforcement.

Section VI – Channel Repair Recommendations, Prioritization and Cost Estimate include specific recommendations for each deficiency pattern previously identified. The recommendations included replacement alternatives, retrofit alternatives, maintenance program alternatives, as well as "Accept As Is" alternatives. To address the most critical structural concern, namely excessive wall deflections, three retrofit alternatives were conceptually developed in addition to the replacement alternative. The three alternatives are vinyl sheet piling, concrete facing with strut, and concrete facing with piles. To address the longitudinal crack in the invert deficiency, the replacement and the vinyl sheet piling alternatives were recommended. The trapezoidal channel lining deterioration was addressed with the replacement and the "Accept As Is" recommendations. Other alternatives for this deficiency were deemed not cost-effective. Similarly, the recommendation for the channel segments with vertical temperature expansion and contraction cracks was the "Accept As Is" alternative. Repairing each vertical crack along the alignment would not be cost effective especially since most segments with vertical temperature cracks also experienced other deficiencies whose retrofit recommendation, when eventually implemented would simultaneously address the temperature cracks. For spillage of backfill and foundation material through weepholes and gaps and for wall expansion joint deterioration, Biggs Cardosa Associates, Inc. recommends that a maintenance program alternative be implemented that would periodically check for voids and sinkholes, and backfill as required. The general recommendation for spalling of concrete cover is to remove any unsound concrete and patch the deficiency area.

A prioritization and cost estimate table is provided in Section VI, which indicates per reach the remaining life expectancy, types of deficiency patterns, the percentage of reach the deficiency affects; recommended repair alternatives, additional life each repair alternative adds, and associated cost for each repair alternative. This table is meant to summarize the pertinent information to allow the Santa Clara Valley Water District to prioritize their options.

V. GENERAL CONCRETE CHANNEL DESIGN RECOMMENDATIONS

➢ Excessive Wall Deflections

To prevent the reoccurrence of excessive wall deflections, which are found throughout the U-frame channel sections of Permanente Creek, the following additional design steps and modified details are recommended for future wall designs.

1. For new U-frame channel walls assumed to encounter the active lateral pressure distribution, the yield deflection of the walls should be calculated and compared to the deflection required to mobilize the assumed active lateral earth pressure. The deflection required to mobilize the active lateral earth pressure is dependent on the retained soil and the height of the wall. For the U-frame channel wall to encounter the assumed active lateral pressure distribution without deflecting excessively, the yield deflection of the wall must be greater than the deflection required by the retained soil to mobilize the active lateral earth pressure. The greater the difference, the larger the safety factor becomes to ensure that the wall will not deflect excessively in the future.

2. To reduce the detrimental impact corrosion has on the main flexural reinforcement of the channel walls, the use of epoxy coated reinforcement should be specified for all water carrying structures.

3. To reduce the amount of moisture that may come into contact with the main flexural reinforcement via the construction joint, raise the wall construction joint 6-inches above the invert slab.

4. To prevent longitudinal cracking of the invert, provide continuous reinforcement along the bottom of the invert slab.

5. To prevent the possibility of reinforcement pulling out of the invert slab, the hooked development lengths into the invert slab should be calculated and provided.

➢ Vertical Temperature Expansion and Contraction Cracks in Walls

To prevent the extensive vertical temperature cracking, which is found throughout the U-frame channel sections of Permanente Creek, Hale Creek and the Permanente Diversion, the following additional design steps and modified details are recommended for future wall designs.

1. To reduce the vertical temperature expansion and contraction cracks on the channel walls, a temperature reinforcement design should be performed in lieu of defaulting to the minimum temperature reinforcement required by the code. The minimum code requirement is generally based on the assumption that the expansion joints are approximately 100 feet apart and control joints are approximately 25 feet apart. Also, the code requirement typically applies to soundwalls and retaining walls and not water carrying structures where water is

more apt to seep into the expected temperature expansion and contraction cracks. By designing the temperature reinforcement and adding more steel than the code minimum, the temperature crack widths and lengths can be significantly reduced.

Because Concrete Pavement Design and Concrete Channel Design is somewhat analogous, the following excerpt from the reference; [E.J. Yoder and M.W. Witchzak, "Principles of Pavement Design," 2nd Edition, John Wiley and Sons, Inc., New York, 1975] may be used to design the longitudinal reinforcement to minimize shrinkage and temperature cracks in the channel structures.

Minimum steel (%)

$$\rho = (S_c'/S_s)(100) \qquad \text{EQN (17.6)}$$

Shrinkage

$$\rho = [(S_c'/(S_s + zE_s - nS_c'))]100 \qquad \text{EQN (17.7)}$$

Temperature drop

$$\rho = [(S_c'/(S_s + nS_c'))]100 \qquad \text{EQN (17.8)}$$

$$\rho = [(S_c'/(2(S_s - \Delta t \varepsilon E_s))]100 \qquad \text{EQN (17.9)}$$

where S_c' = ultimate tensile strength of the concrete

S_s = yield strength of steel

z = coefficient of shrinkage

Δt = total temperature drop (°F)

ε = coefficient of thermal volume change

$\eta = E_s/E_c$

The percentage of steel as given by equation 17.6 will normally be the minimum amount required for shrinkage. The minimum of steel to control changes resulting from temperature drops is that given in equation 17.8.

It becomes necessary to determine the amount of steel by each of the equations and then to use the largest amount in the design. If, for some reason it is believed that the coefficient of "subgrade drag" f, is not equal to 1.5, equation 17.10 should be used in lieu of equation 17.8.

$$\rho = [(S_c'/(S_s + nS_c'))](1.3 - 0.2f)(100) \qquad \text{EQN (17.10)}$$

One of the most difficult factors for the designers to evaluate is that regarding values to substitute in equations 17.6 through 17.10. Table 17.7 gives typical values of properties to use in the equations for design of steel for CRCP. Care must be taken in selecting the proper value for temperature drop to use in equation 17.9, since major distress to CRC pavements occurs during extremely cold weather.

Table 17.7 Typical Values of Properties to Use in Design of Steel for CRCP

1. Sc' = Tensile strength of concrete
   = 0.4 to 0.5 MR
2. z = Coefficient of shrinkage
   = 0.0005 to 0.0006
3. ε = Coefficient of thermal change
   = 0.000005 in./in. per °F.
4. Ss = Yield strength of steel, grade 60,000 psi
5. Safety factor applied to ρ = 1.2 to 1.5

Safety factor: The percentage of steel as given by the equations needs to have a factor of safety applied to them. Recommended factors are given in Table 17.7. In cold climates (northern U.S. for example) the larger of the two values in Table 17.7 should be used.

2. To reduce the corrosion of the wall reinforcement due to the vertical temperature cracks, the use of epoxy coated reinforcement should be specified for water carrying structures.

➢ Trapezoidal Channel Lining Deterioration

To prevent the trapezoidal channel lining deterioration which is found throughout the trapezoidal channel sections of Hale Creek and the Permanente Diversion, the following additional design steps and modified details are recommended for future wall designs.

1. To reduce the horizontal flexural cracking observed along the channel lining, design the lining for lateral earth pressures. When a thickened lip is used at the top of the channel lining walls, consider the stiffening effects of that thickened lip on the channel walls.

2. To reduce the vertical temperature cracking observed along the channel lining, increase the longitudinal horizontal reinforcement by performing a temperature reinforcement design in lieu of defaulting to the minimum temperature reinforcement required by code.

3. To improve the constructibility of the channel lining, the minimum channel lining thickness should be at least 6-inches.

➢ Spillage of Backfill & Foundation Material Through the Weepholes & Gaps

To prevent the spillage of backfill and foundation material through the weepholes and gaps, the following modified details and design recommendations are recommended for future wall designs.

1. To reduce the spillage of backfill and foundation material through the expansion joint gaps, a waterstop should be used in addition to the expansion joint filler. Over time, as the expansion joint filler deteriorates, the presence of the waterstop will prevent backfill and foundation material from entering the channel.

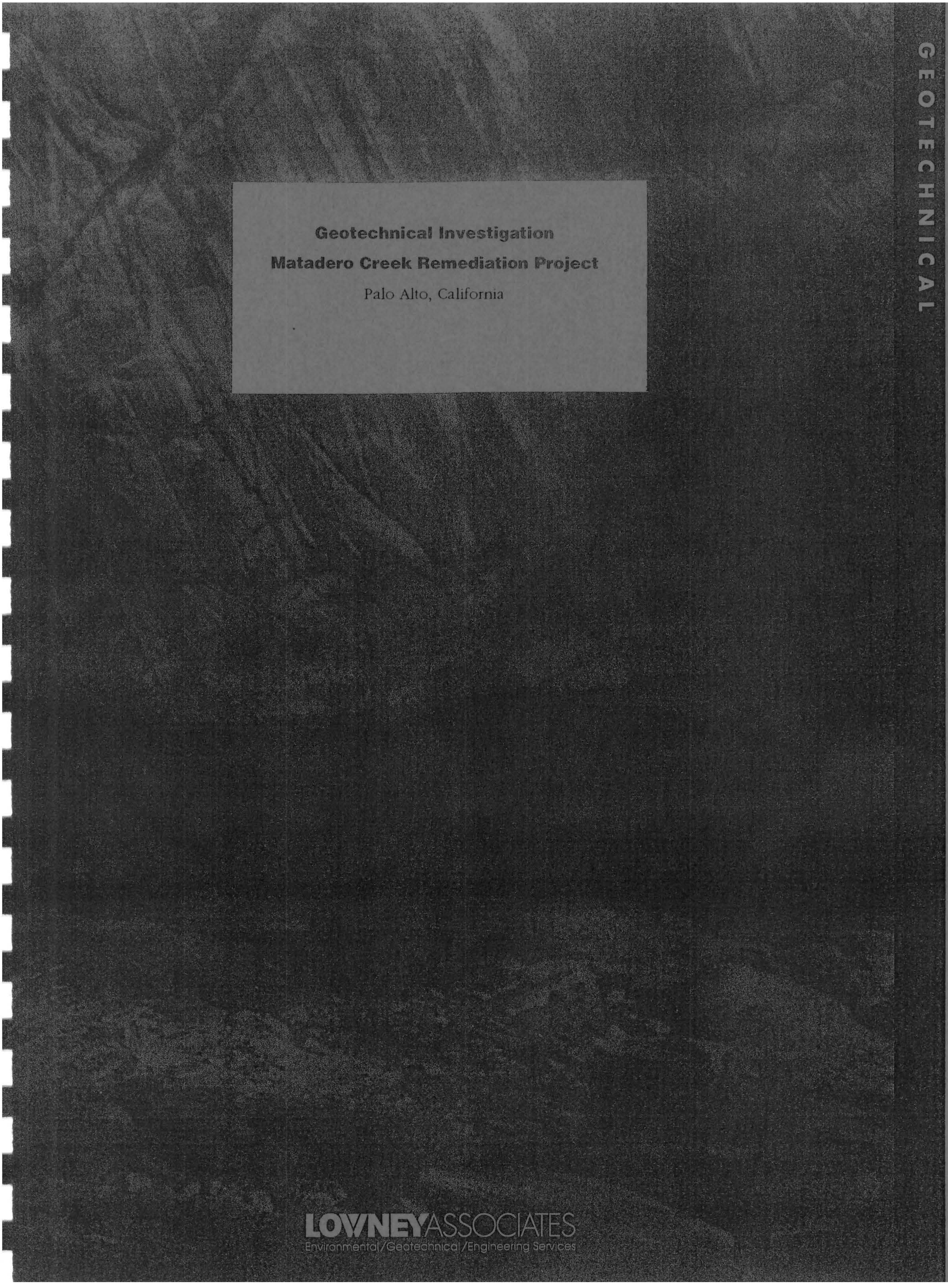
2. To reduce the spillage of backfill and foundation material through the weepholes, better drainage details are required. Attaching a burlap sack filled with pea gravel to the wire screen affixed to the back of the weephole is one such detail. However, over time the burlap sack should be expected to deteriorate and the effectiveness of the drain will diminish.

   Preventing the backflow of water from the channel into the retained soil is essential in reducing the probability of voids forming behind the channel walls or lining. To achieve this, weephole flap covers can be installed. These flap covers would allow water to flow from the retained material into the channel, which relieves the hydrostatic pressure. While preventing channel water from back flowing out through the weepholes during high channel flows.

3. In lieu of providing special weephole flap covers with channel wall weepholes, the designer may opt to simply design the channel walls with weepholes for an increased design load factored for a temporary condition. This increased factored design load should account for the temporary saturated soil condition in which the backfill material becomes saturated through backflow during high channel flow. The backflow will develop a temporary hydrostatic head during the period when the channel flow level becomes low again and the saturated backfill slowly drains through the weepholes. A recommended factored design load used for this temporary condition would be 75% of the design lateral earth pressure for the saturated soil condition.

- **Exposed Reinforcement Due to Lack of Concrete Cover**

To prevent wall reinforcement from being exposed due to lack of concrete cover, more stringent quality assurance procedures should be implemented during the time of construction.



Geotechnical Investigation
Matadero Creek Remediation Project

Palo Alto, California

GEOTECHNICAL

LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

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Matadero Creek Remediation Project

Palo Alto, California

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GEOTECHNICAL INVESTIGATION
MATADERO CREEK REMEDIATION PROJECT
PALO ALTO, CALIFORNIA

INTRODUCTION

In this report we present the results of our geotechnical investigation for the Matadero Creek Remediation Project to be located in Palo Alto, California, as shown on the Vicinity Map, Figure 1. The purpose of our investigation was to evaluate the subsurface conditions at the site and to provide geotechnical recommendations for design of the proposed improvements.

Project Description

Based on our discussions with Schaaf and Wheeler, we understand that the Matadero Creek Remediation Project will consist of a combination of channel modifications to Matadero Creek between Highway 101 and Alma Street to provide increased flood protection. Currently, the proposed channel modifications will consist of the following:

- Raise the existing floodwalls between Highway 101 and Alma Street. The floodwalls will be raised on the order of 1 to 6 feet above the top of the existing floodwalls. Drilled pier foundations are being considered for support.
- Bridge modifications to the Louis Road crossing consisting of channel modifications (converting the exiting trapezoidal channel to a U-frame channel) beneath the bridge, and raising the bridge by approximately 1 foot.

It is noted that additional channel modifications are being considered downstream of Highway 101. Geotechnical evaluation of these improvements is presented in a separate report.

Scope of Services

Our scope of services was presented in detail in our agreement with you dated March 24, 1999. To accomplish this work, we have provided the following services:

3. Reviewed existing geotechnical reports and as-built plans for bridge structures, floodwalls, and channel improvements between Alma Street and Highway 101.

2. Exploration of the subsurface conditions by drilling 11 borings and retrieving relatively undisturbed soil samples for observation and laboratory testing. Additionally, we converted six of the borings to ground water monitoring wells at the site to determine the depth to ground water at the site.

3. Evaluation of the physical and engineering properties of the subsurface soils by visually classifying the samples and performing various laboratory tests on selected samples.

4. Engineering analysis to evaluate geotechnical parameters for floodwall foundation design; U-Frame Section Channel design; bridge foundation design at Louis Road; and site earthwork.

5. Preparation of this report as a summary of our findings and to present our conclusions and recommendations.

Lowney Associates prepared a Phase I environmental site assessment for this project and presented the results in a separate report dated July 15, 1999.

This report was prepared for the sole use of Schaaf and Wheeler and their consultants for application to the design of the proposed Matadero Creek Remediation Project in accordance with generally accepted geotechnical engineering practices at this time and location. No warranty is expressed or implied.

SITE CONDITIONS

Exploration Program

Subsurface exploration was performed on June 8 through 11, 1999, using conventional, truck-mounted hollow-stem auger drilling equipment to investigate, sample, and log the subsurface soils. Eleven exploratory borings were drilled to depths ranging from 25 to 31½ feet. Six of the borings were converted to "permanent" ground water monitoring wells at the completion of drilling. The other borings were backfilled in accordance with requirements of the Santa Clara Valley Water District (SCVWD) guidelines. The approximate locations of the borings and wells are shown on the Site Plan, Figure 2. Logs of our borings and details regarding our field investigation are included in Appendix A; the results of our laboratory tests are discussed in Appendix B.

Borings LA-1, LA-3, LA-5, LA-7, LA-9, and LA-11 were converted into "permanent" ground water monitoring wells with the installation of 2-inch I.D. flush-threaded, schedule 40 PVC casing. The casing in the lower portion of the wells to about 6 feet below grade had 0.02-inch factory machined slots. After the casing was installed, a filter pack composed of No. 3 sand was placed in the 3- to 4-inch annular space to approximately 1-foot above the slotted casing. The remaining annular section consisted of an approximately 1-foot-thick seal of bentonite pellets or chips, followed by a 10-sack portland cement and sand slurry mix to the surface grade. The well was completed with a flush-mounted wellhead box. In addition, the PVC well casing was fitted with a watertight, locking well cap at the surface. Lowney Associates performed the initial well readings approximately 1 week June (June 1999) after well construction, and again approximately 1 month (July 1999) after well construction. Santa Clara Valley Water District personnel performed periodic groundwater monitoring from August 1999 through September 2001. Ground water measurements from the wells are summarized in the section titled, "Ground Water."

Surface

The site of the proposed channel remediation project is located within the right-of-way of the existing Matadero Creek. The existing channel has concrete-lined side slopes with 1½ to 1 (horizontal to vertical) inclination. Based on our review of the as-built plans for the channel, the channel invert is positioned about 10 feet below the top of the channel. Two- to 4-foot-high floodwalls were constructed along both sides of the channel from Highway 101 to Alma Street. The as-built plans provided by the district indicate that floodwalls between Highway 101 and Middlefield Road are supported on shallow foundations or consist of vertical extensions of the existing concrete lining. Based on the as-built plans received from the district, shallow foundations founded at about 3 feet below the top of channel lining are shown from Middlefield Road to Cowper Street and Waverley to Alma Streets. The floodwalls between Cowper and Waverley Streets are a vertical extension of the channel lining. The footing widths vary from 2 feet 3 inches, to 3 feet 9 inches wide. No design bearing pressures were provided on the plans. The SCVWD's right-of-way typically extends 5 to 8 feet from the edge of the concrete lining on the southeastern creek bank. The SCVWD's right-of-way typically extends 12 to 15 feet wide on the northwestern side of the channel. The northwestern side of the channel is maintained as an unpaved access road. At the time of our investigation in June 1999, water was observed in the lined channel and was estimated to be several inches deep.

Several bridges have been constructed across Matadero Creek within the subject channel reach. Bridges have been constructed at Alma Street, Bryant Street, Waverley Street, Cowper Street, Middlefield Road, Ross Way, Louis Road, and Greer Road. Numerous underground utilities are also present in the area of the existing crossings. Additionally, two buried 60KV electric transmission lines, a sewer line, and a buried communications cable run along the northeastern side of the channel. The 60KV electronic transmission line is reportedly encased in a thermal sand-cement slurry.

Subsurface

All of our borings encountered fill material overlying native alluvium. The fill material encountered in the borings consisted of silty clay with variable percentages of sand and gravel. The fill varies between 3½ to 8 feet in thickness at our boring locations. Two Atterberg Limits tests performed on the fill resulted in Plasticity Index (PI) values of 49 to 58, indicating high expansion potential. At Boring LA-11, a 9½-inch-thick concrete slab-on-grade overlying 2½ inches of aggregate base was encountered at the ground surface in the upper portion of the fill.

The native soil deposits encountered beneath the fill consisted of alternating layers of stiff to very stiff silty clay, medium dense to dense sand, medium dense to dense clayey sand, and medium dense to very dense gravely sand. Two Atterberg Limits tests on the native clayey soils resulted in PIs ranging between 17 to 23, indicating low to moderate expansion potential.

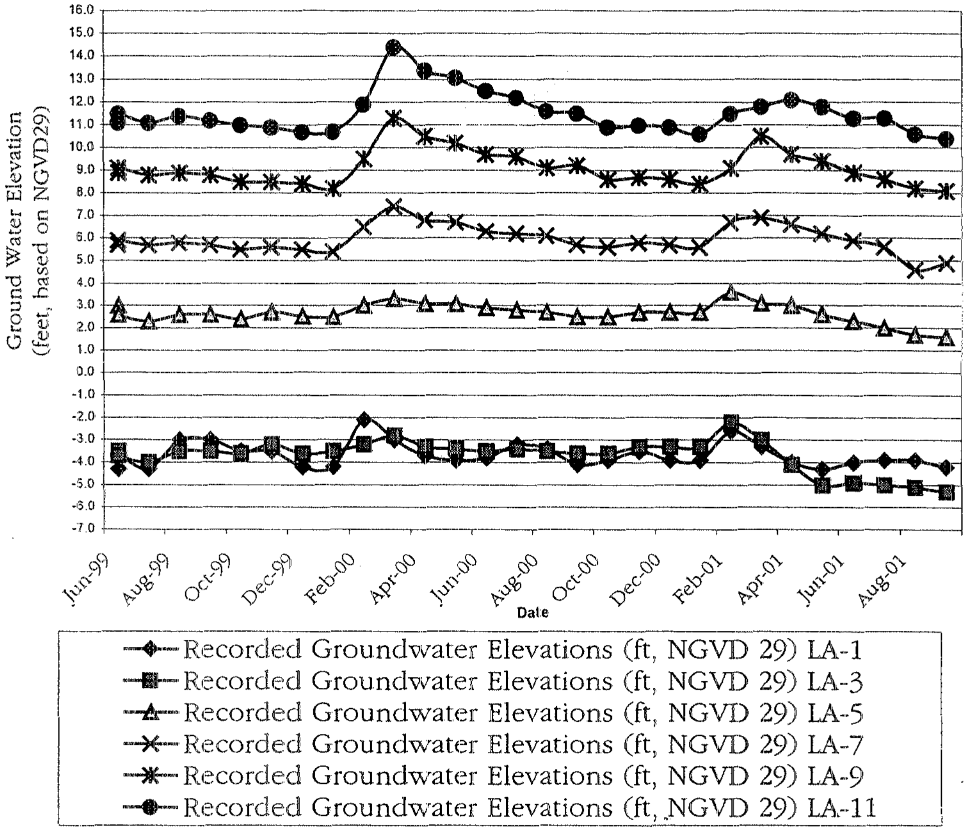
Ground Water

Borings LA-1, LA-3, LA-5, LA-7, LA-9, and LA-11 were converted to ground water monitoring wells after completion of drilling. The depth to free ground water measurements performed by Lowney Associates after the completion of drilling is summarized in Table 1. Also summarized in Table 1 are the ground surface elevations (i.e. approximate top of well elevation) in National Geodetic 1929 Vertical Datum (NGVD 29). We were provided the ground surface elevations and ground water surface elevations referenced to NGVD29 by the Santa Clara Valley Water District. Chart 1 shows the elevation of free ground water encountered in each boring drilled for this investigation. National Geodetic Vertical Datum (NGVD) 29 ground surface elevations at each well location were 6.1, 6.7, 11.2, 16.3, 22.1, and 24.3 feet, respectively. Ground water depth measurements ranged from –7.5 to 14 feet, corresponding to NGVD 29 elevations of –5 to 14.5 feet. The depth to ground water shown on the "Depth to First Ground Water Map" prepared by Rogers and Williams (1974) varies from 4 to 11 feet, in the project vicinity. Fluctuations in the level of the ground water may occur due to variations in rainfall, tidal fluctuations, creek flows, and other factors not in evidence at the time measurements were made.

TABLE 1. **Initial Depth to Ground Water Measurements by Lowney Associates**

Boring/ Well	Date Drilled	Ground Surface Elevation (NGVD29	Initial Depth to Ground Water* (feet)	Initial Ground Water Elevation (NGVD29 (feet)	Depth to Ground Water on June 18, 1999 (feet)	Ground Water Elevation (NGVD29) June 18, 1999 (feet	Depth to Ground Water on July 20, 1999 (feet)	Ground Water Elevation (NGVD29 July 20, 1999 (feet
LA-1	6/8/99	6.1	10.4	-4.3	9.8	-3.7	10.4	-4.3
LA-2	6/8/99	---	7.5	---	---	---	---	---
LA-3	6/8/99	6.7	10.2	-3.5	10.4	-3.7	10.7	-4.0
LA-4	6/9/99	---	10.5	---	---	---	--	---
LA-5	6/9/99	11.2	8.2	3.0	8.6	2.6	8.9	2.3
LA-6	6/10/99	---	9.0	---	---	---	---	---
LA-7	6/9/99	16.3	10.6	5.7	10.4	5.9	10.6	5.7
LA -8	6/11/99	---	11.5	---	---	---	---	---
LA-9	6/10/99	22.1	13.2	8.9	13.0	9.1	13.3	8.8
LA-10	6/11/99	---	13.5	---	---	---	---	---
LA-11	6/10/99	24.3	13.2	11.1	12.8	11.5	13.2	11.1

CHART 1. **Ground Water Elevation Measurements**



GEOLOGIC HAZARDS

A brief qualitative evaluation of certain geologic hazards was made during this investigation. Our comments concerning these hazards are presented below.

Fault Rupture

egional fault map illustrating known active faults elativeto the site is presented in Figure 3. The site is otlocated within a currently designated Alquist -Priolo arthquakeFault Zone (known formerly as a Special tudies Zone). As shown on Figure 3, no known urfaceexpression of active faults is believed to exist ithinthe site. Fault rupture through the site, therefore, is not anticipated.

Ground Shaking

Strong ground shaking can be expected at the site during moderate to severe earthquakes in the general region. This is common to virtually all developments in the San Francisco Bay Area. The "Seismicity" section that follows presents a detailed discussion regarding potential levels of ground shaking.

Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. For this project site, the soils encountered in the borings consist primarily of clays. The sands encountered in our borings were generally medium to very dense and contained variable amounts of fine-grained material. For these reasons and based upon engineering judgment, the potential for liquefaction is low during seismic shaking.

Borings performed by others indicate relatively thin isolated layers of clayey sand to clayey gravel that are medium dense with a moderate susceptibility to liquefaction. Because the sand layers are medium dense to very dense and located below thick clay deposits, the potential for ground rupture due to liquefaction is considered to be low.

Differential Compaction

If near-surface soils vary in composition both vertically and laterally, major earthquake shaking can cause non-uniform compaction of the soil strata, resulting in movement of the near-surface soils. In our opinion, because the subsurface soils encountered at the site are generally stiff or medium dense to dense and do not appear to change in thickness or consistency abruptly over short distances, we judge the probability of differential compaction (i.e. non-uniform settlement of the subsurface soils due to major earthquake shaking) at the site to be low.

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. Generally in soils, this movement is due to failure along a weak plane, and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil displace laterally towards the open face. Cracking and lateral movement may gradually propagate away from the face as blocks continue to break free. Generally, failure in this mode is analytically unpredictable, since it is difficult to determine where the first tension crack will occur.

Because the soils at the creek banks are stiff to hard clays with low liquefaction potential, and the excavations will be retained with concrete-lined channel walls, the probability of lateral spreading occurring at the site during a seismic event is low.

SEISMICITY

Regional Active Faults

The San Francisco Bay Area is recognized by geologists and seismologists as one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined, active, fault zones of the San Andreas Fault system, which regionally trend in a northwesterly direction. The San Andreas Fault, which generated the great San Francisco earthquake of 1906, passes about 6 miles southwest of the site. Two other major active faults in the area are the Hayward Fault, located about 13 miles northeast of the site, and the Calaveras Fault, located about 17 miles northeast. Also of note is the Monte Vista - Shannon Fault, located about 4 miles southwest of the site.

Maximum Estimated Ground Shaking

We performed a Deterministic Seismic Hazard Analysis (DSHA) for this site. This analysis utilizes the maximum Moment Magnitude (M_w) for the controlling faults, published attenuation curves, the shortest distance to the fault, and the site-specific response characteristics. Based on the attenuation methods of Campbell and Bozorgnia (1994), the mean peak ground acceleration (PGA) expected for this site is 0.56g from a magnitude 6.8 M_w event on the Monte Vista - Shannon Fault, located 4 miles to the southwest.

Maximum Past Ground Shaking

We performed a computer search of known historical earthquakes of Richter Magnitude 5 or greater within a 100 kilometer radius of the site using an abbreviated version of the California Division of Mines and Geology (CDMG) computerized earthquake catalog of events through December 1998. We also included data from Townley and Allen (1939) and the U.S. Geological Survey Earthquake Data Base System, giving 198 years of data in the search area. The results of our computer search indicate that 86 known earthquakes of Richter Magnitude 5 or greater have occurred within 100 kilometers of the site between 1800 and December 1998.

Four earthquakes of Richter Magnitude 7 or greater have occurred in the region, during the above noted time period, including the Loma Prieta earthquake of 1989, centered about 30 miles from the site. Based on attenuation methods of Campbell and Bozorgnia (1994), the maximum historic site acceleration that may have been experienced at the site is computed at approximately 0.24g, resulting from a Richter Magnitude 8.25 earthquake in 1906 located about 28 miles from the site.

The computer-generated acceleration values and probabilities should only be considered reasonable best estimates. All of the influences affecting attenuation and occurrence rates are not yet known; furthermore, there are uncertainties in every parameter used to obtain such results. At the present time there is no test available to verify the validity of the acceleration and probability data. Therefore, significant deviations from the indicated values are possible due to geotechnical and geological uncertainties and other specific site conditions.

Future Earthquake Probabilities

The Working Group on California Earthquake Probabilities (1990) has concluded that the probability of a magnitude 7.0+ earthquake in the San Francisco

Bay Area over the next 30 years is 67 percent. This probability is a low estimate since only three active faults in the area, the Hayward, San Andreas, and Rodgers Creek were included in the study. Schwartz (1994) concludes that the probability of the occurrence of one or more magnitude 7.0+ earthquakes in the Bay Area is substantially higher than 67 percent, possibly as high as 90 percent. Please note that significant earthquakes could occur on an active or a potentially active fault for which probabilities have not been estimated.

Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when or where an earthquake will occur. Our current understanding of earthquake activity indicates, however, that the site will likely be subject to at least one moderate to severe earthquake within 50 years following construction. During such an earthquake the danger of fault offset at the site is slight, but strong shaking of the site is likely to occur.

CALTRANS Seismic Design Criteria

Active faults have the potential to affect the project, and therefore should be considered in design. Based on Caltrans California Seismic Hazard Map 1996 and A Technical Report to Accompany the Caltrans California Seismic Hazard Map 1996 (Caltrans Map and Report, 1996), and Caltrans Guidelines for Foundation Investigation and Report (2000), we have developed seismic design criteria to be used in seismic analysis and design of the bridge replacement as shown in Table 2.

TABLE 2. **Seismic Design Data**

Categorization/Coefficient	Design Value
Controlling Fault Source	Monte Vista Shannon
Design Magnitude	6.5± 0.25 M_W
Peak Rock Acceleration	0.48g
Fault Distance	4.3 miles
Soil Profile Type	Type D

In addition to the design values given in Table 2, we recommend using Figure B.7 as the corresponding standard SDC ARS Curve for design. This figure may be obtained from Caltrans Seismic Design Criteria (1999), Appendix B. In addition, for structures located within 10 miles of an active fault, the spectral acceleration on the SDC ARS curves shall be modified as follows:

- Spectral acceleration magnification is not required for $T \leq 0.5$ seconds
- Increase the spectral acceleration for $T > 1.0$ seconds by 20%
- Spectral acceleration for $0.5 \leq T \leq 1.0$ shall be determined by linear interpolation

Because we have judged the potential for liquefaction at the site to be low, in our opinion, further modification of the ARS curves is not necessary.

Retaining walls typically perform well under seismic loading, therefore seismic design is not typically incorporated in retaining wall type structure design by the structural engineer.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The primary geotechnical concerns with the project are:

- Influence of ground water on the design and construction of the proposed improvements;
- Support of temporary excavations; and
- The presence of moderately to highly expansive soils.

In our opinion, the proposed improvements are feasible from a geotechnical standpoint provided the design and construction is performed in accordance with the recommendations presented in this report.

Water was observed flowing in the bottom of the Matadero Creek channel during our field investigation. Additionally, ground water was measured in our monitoring wells and borings at 7.5 to 14 feet below the existing ground surface, corresponding to NGVD 29 elevations of –5 to 14.5 feet. Seasonal fluctuations in the ground water levels should be anticipated. The contractor should anticipate dewatering and/or other means of ground water control during construction of the proposed improvements. Furthermore, construction in the creek will likely require placement of subgrade stabilization materials at the base of the channel, as the native subgrade soils are anticipated to be unable to support construction traffic. Geotechnical recommendations for preparation of the subgrade at the channel base are presented in the sections that follow.

Temporary excavations will be necessary for construction of the U-Frame Section Channel under the

Louis Road Bridge, floodwalls improvements between Highway 101 and Alma Street, and bridge replacement at Louis Road. To provide safe working conditions and reduce the potential for damage of adjacent utilities and structures, we recommend that an excavation support plan be developed by the contractor prior to construction. Geotechnical considerations for temporary excavations are presented in the "Temporary Slopes and Shoring" section of this report.

Another geotechnical concern is the moderate to high expansion potential of the native soils. To reduce the potential for damage to the planned structures, we recommend slabs-on-grade have sufficient reinforcement and be supported on a layer of non-expansive fill and the foundations be founded below the depth of seasonal moisture fluctuation. Detailed recommendations are presented in the following sections of this report.

Plans, Specifications, and Construction Review

Because subsurface conditions may vary considerably from those predicted by relatively small diameter, widely spaced borings, and in order to check that our report recommendations have been properly implemented, we recommend that we be retained to review the final construction plans and specifications. also, the assumed and/or actual geotechnical conditions can be greatly affected by the construction process. All earthwork and foundation preparation should be performed under the direct observation of the geotechnical engineer of record.

EARTHWORK

General

Earthwork for this project is likely to consist of removing the existing channel lining, bridge improvements and designated vegetation not to remain, installation of temporary shoring, excavation in the channel, drilling for floodwall and bridge foundations, subgrade preparation, backfilling of channel improvements, and restoration of the surface improvements.

Clearing and Soil Disposal

The site should be cleared of all surface and subsurface deleterious materials including existing foundations, slabs, buried utility lines, fills, pavements, debris, designated trees, shrubs, and associated roots. All deleterious materials should be removed from the site and appropriately disposed.

Our Phase I environmental site assessment indicates that previous gasoline releases at the ARCO gas station located at 2995 Middlefield Road reportedly have impacted soil and ground water adjacent to the Matadero Creek channel. It appears that the remediation activities at the ARCO station have reduced contamination in the soil and ground water adjacent to the creek channel. However, during the flood wall modifications and improvements, residual levels of petroleum hydrocarbons may be encountered. Based on field observations, if impacted soil is encountered, the soil should be stockpiled separately and soil samples should be collected to evaluate disposal options.

Dewatering

As discussed previously in the "Ground Water" section, ground water is anticipated near and possibly above the invert of the channel. Several inches of water was observed flowing in the channel bottom during our site visit in June 1999. If excavations for U-Frame Section Channel construction below Louis Road bridge extend to a depth of about 15 feet as proposed, dewatering may be needed to control ground water and surface water so that backfilling can be done in a dry environment. It is anticipated, based on soil borings made in the area, that the base of the excavation will penetrate mostly sandy clay or clayey sand. Considering these conditions, it is conceivable that a temporary earth cofferdam could be used to divert stream flow and that the interception and removal of seepage into the excavation might be accomplished using a system of sump pits and pumps. It is noted that a system of well points and/or dewatering wells might need to be constructed to mitigate the ground water during construction. The final selection of the dewatering system is the responsibility of the contractor. However, it is recommended that the contractor submit his proposed dewatering system scheme for review by the engineer prior to installation. A discussion of ground water related construction of drilled piers is presented in the "Foundation" section of this report.

Subgrade Preparation

In areas along the edges of the channel after the site has been properly cleared, stripped, and necessary excavations have been made, the exposed surface soils in those areas to receive fill, slabs-on-grade, or pavements should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the recommendations for fill presented in the "Compaction" section. The finished compacted subgrade should be firm and non-yielding under the weight of compaction equipment.

Earthwork contractors should be made aware of the moisture sensitivity of clayey soils and potential compaction difficulties. If construction is undertaken during wet weather conditions, the surficial soils may become saturated, soft and unworkable. Based on the results of our borings and laboratory testing, the subgrade materials anticipated to be exposed exhibit relatively high moisture contents, in some cases 10 percent or more above optimum. Drying of these exposed subgrade materials may be required to minimize pumping conditions. As an alternative, stabilization of these materials may be needed. Subgrade stabilization techniques might include the use of engineering fabrics and/or crushed rock or chemical treatment. Therefore, we recommend that consideration be given to construction during the summer months.

Heavy construction machinery should not be allowed to operate on the base of excavations made to depths of 2 feet above the natural water table or deeper. This precaution is recommended because of the potentially unstable and pumping subgrade conditions which can be anticipated in soils of moderate to high natural moisture contents. If such equipment is needed in these areas, stabilization of the base of the excavation should be anticipated.

Excavation for the U-Frame Section Channel is expected to extend into saturated, moderate strength clay or sand deposits and below ground water. The sand or clay at the base of the channel excavation is expected to be unable to support construction traffic. Disturbance of these materials during construction could lead to substantially large settlements. To minimize disturbance, it is recommended that the last 2 feet of excavation be made by equipment supported above this level. This might be accomplished with a backhoe excavating from locations at least 2 feet above final subgrade or with a backhoe from outside the excavation. If the contractor does not follow this recommendation, the subgrade should be overexcavated to a depth of 2 feet and replaced with a layer of geotextile fabric (Mirafi 700X or equivalent) and a 2-foot section of bridging rock to bridge the soft disturbed subgrade. Bridging rock for placement on top of geotextile bridging fabric shall consist of clean, hard, durable rock with the following grading requirements:

Sieve Size	Percentage Passing Sieve
6"	100
2"	0 - 50
3/4"	0 - 10

Material for Fill

On-site soils below the stripped layer having an organic content of less than 3 percent by weight are suitable for use as fill (excluding bridging material) at the site. In general, fill material should not contain rocks or lumps larger than 6 inches in greatest dimension, with no more than 15 percent larger than 2½ inches. Imported fill material should be predominantly granular with a Plasticity Index of 15 or less.

Compaction

All fill, as well as scarified surface soils in those areas to receive fill or slabs-on-grade, should be compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557, latest edition. Fill should be placed in lifts no greater than 8 inches in uncompacted thickness at a moisture content near the laboratory optimum. Each successive lift should be firm and non-yielding under the weight of the construction equipment.

The upper 6 inches of subgrade in pavement areas and all aggregate base should be compacted to at least 95 percent relative compaction (ASTM D1557, latest edition). Aggregate base and all import soils should be compacted at a moisture content near the laboratory optimum.

Bridging material should be compacted with a vibratory roller or heavy vibratory sled (i.e. turtle). The engineer should observe placement and compaction of the bridging material.

Trench Backfill

All utility trenches should be backfilled with compacted fill in accordance with local requirements or the recommendations contained in this section. Fill material should be placed in lifts not exceeding 8 inches in uncompacted thickness and should be compacted to at least 90 percent relative compaction (ASTM D1557, latest edition) by mechanical means only. If imported sand is used as backfill, the upper 3 feet in building and pavement areas should be compacted to 95 percent. The upper 6 inches of backfill in all pavement areas should be compacted to at least 95 percent relative compaction.

Temporary Slopes and Shoring

The contractor should be responsible for all temporary slopes and design of any required shoring. The design of the shoring should be performed by a registered civil or structural engineer, retained by the contractor, and submitted to the engineer prior to its implementation.

Shoring, bracing or temporary slopes should be performed by the contractor in accordance with the strictest governing safety standards. The temporary slopes and/or shoring systems should be monitored to evaluate the movement and settlement of walls adjacent to the ground during construction by the contractor. If potentially excessive movement is observed, the contractor should flatten temporary slopes or provide additional shoring to control movement within an acceptable range. Vertical excavations may be temporarily shored using sheet piling, soldier piles, lagging-braced shoring or other shoring schemes, depending on the judgment of the shoring designer and contractor. As a minimum, we recommend that the lateral soil pressures presented in the "U-Frame Section

Channel" section of this report be used in the design of temporary shoring.

The excavation shoring should be designed for additional surcharge loads due to normal street loads, loading from adjacent structures, or other surcharge loads. To prevent excessive surcharging of the shoring from heavy construction vehicles such as concrete trucks, we recommend that such vehicles be kept at least 10 feet from the top of the excavations; if this is not possible, the shoring must be designed to resist the additional lateral loads. In addition, all shoring schemes should be designed with sufficient rigidity to prevent detrimental displacements at the top of the shoring, particularly where excavations are completed adjacent to existing utilities, pavements or other improvements. At a minimum, the shoring should be designed for a uniform contractor surcharge of 240 psf behind the shoring.

Lateral loads exerted on soldier piles may be resisted by an equivalent fluid pressure of 300 pounds per cubic foot acting against twice the projected area of the individual pier shafts below rough existing grade, with a maximum of 1,500 pounds per square foot at depth.

Where excavations are supported with temporary shoring, some settlement of the adjacent ground surface should be anticipated. If these shored excavations are placed in paved streets, cracking and settlement of the adjacent pavements should be anticipated. The project specifications should require restoration of these damaged pavements, curbs, gutters, etc., to their preconstruction condition. A precondition survey of the area performed by the contractor prior to construction, including photos, should be considered. To ensure safe performance of the shoring system, the slopes and shoring system should be monitored during construction to evaluate the movement and settlement of shoring walls and adjacent ground during construction.

Surface Drainage

Positive surface gradients should be provided adjacent to the structures to direct surface water away from the foundations and slabs towards suitable discharge facilities. Ponding of surface water should not be allowed on or adjacent to structures, slabs-on-grade, or pavements.

Construction Observation

All grading and earthwork should be performed under the observation of the engineer to check that the site is properly prepared, the selected fill materials are satisfactory, and that placement and compaction of the fills has been performed in accordance with our recommendations and the project specifications. The project plans and specifications should incorporate all recommendations contained in the text of this report.

Variations in soil conditions are possible and may be encountered during construction. In order to confirm correlation between the soil data obtained during our field and laboratory investigations and the actual subsurface conditions encountered during construction and to observe conformance with the plans and specifications, it is essential that the geotechnical engineer be retained to perform continuous or intermittent review during the earthwork, excavation and foundation construction phases.

FOUNDATIONS

Existing Floodwalls

Based on the as-built plans provided, we understand that the existing floodwalls are supported on continuous strip footings extending about 2 to 3 feet below the lowest adjacent grade. A maximum footing design pressure of 1,800 pounds per square foot was recommended in the project geotechnical report for the walls (Woodward-Clyde, 1988). No coefficient of friction for footings was provided in the previous geotechnical report. (Woodward-Clyde, 1988). No design pressures were provided on the project as-built plans. Based on our discussions with Biggs Cardosa Associates we understand that the existing floodwalls will be replaced with new floodwalls supported on spread footings or be modified to be buttressed with drilled pier foundations as required.

Drilled Pier Foundations for Floodwalls

We recommend that the proposed floodwall structures be supported on drilled pier foundations. The piers should have a minimum diameter of at least 16 inches and extend to a depth of at least 8 feet below the existing ground surface. Pier length and/or diameter may be increased by the structural engineer in accordance with the following design recommendations to achieve required horizontal and lateral pier capacity. Piers may be designed for an allowable skin friction of

500 pounds per square foot for combined dead plus live loads with a one-third increase allowed for either transient wind or seismic loading. We recommend that the portion of the pier located within 3 feet of the existing ground surface be neglected when calculating pier capacity. End bearing capacity of the pier should also be neglected. A minimum distance of 2 feet should be maintained between the edge of the pier and/or grade beam and the edge of the sand filled trench containing the two electrical conduits. Piers should have a minimum center-to-center spacing of at least three pier diameters. Grade beams should be designed to span between piers in accordance with structural requirements.

Resistance to uplift loads will be developed in friction along the pier shafts. We recommend that an allowable uplift frictional resistance of 300 pounds per square foot be used.

The bottoms of pier excavations should be dry, reasonably clean, and free of loose soil before reinforcing steel is installed and concrete is placed. We recommend that the excavation of all piers be performed under direct observation of the engineer to establish that the piers are founded in suitable materials and constructed in accordance with the recommendations presented in this report.

Due to the potentially high ground water and presence of sands, casing of each shaft or use of drilling fluids may be necessary. If water cannot be removed from excavations prior to concrete placement, then concrete will need to be placed by tremie pipe. The concrete should be tremied to the bottom of the hole keeping the tremie pipe below the surface of the concrete to avoid entrapment of water in the concrete. As concrete is placed, water is displaced out of the hole.

Total settlement for the recommended pier foundations is estimated to not exceed ½-inch with less than ¼-inch differential settlement between adjacent piers.

Lateral loads exerted on floodwalls supported on piers and grade beams may be resisted by an equivalent fluid pressure of 300 pounds per cubic foot acting against the grade beams and a passive resistance based on an equivalent fluid pressure of 300 pounds per cubic foot acting against twice the projected area of the individual pier shafts below rough existing grade, with a maximum of 1,500 pounds per square foot at depth. If the floodwalls are constructed adjacent to the existing sloping channel lining, the soil pressure on the interior side of the channel should be neglected.

Spread Footing Foundations for Floodwalls

Alternatively, the proposed vertical floodwalls may be supported on continuous strip footings bearing on natural, undisturbed soil or compacted fill. All footings should have a minimum width of 18 inches and should extend at least 36 inches below lowest adjacent finished grade. Lowest adjacent finished grade may be taken as the bottom of interior slab-on-grade or the finished exterior grade, excluding landscape topsoil, whichever is lower. Because of the high expansion potential of the near-surface soils, this relatively deeper footing is recommended to place bearing surfaces below the zone of significant moisture fluctuation in order to reduce the effects of heave or shrinkage.

It is our opinion that the moisture content of bearing soils of footings founded 36 inches below the lowest adjacent finished grade is below the zone of significant moisture fluctuation for this area and therefore, the differential movement from the expansive soils is typically within an acceptable performance range. However, to further mitigate the effects of expansive soils, at the Santa Clara Valley Water District's option, the highly expansive soils below the base of the footing may be overexcavated at least 18 inches, and replaced by a compacted layer of non-expansive soil. Compaction should be done in accordance with the recommendations found in the "Compaction" section of this report.

Footings constructed in accordance with the above recommendations would be capable of supporting maximum allowable bearing pressures of 1,800 pounds per square foot (psf) for dead plus live loads. The allowable bearing pressure may be increased by one-third for all loads including wind or seismic.

The maximum allowable bearing pressures are net values; the weight of the footing may be neglected for design purposes. All footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1:1 (horizontal:vertical) plane projected upward from the bottom edge of the trench to the footing.

All continuous footings should be reinforced with top and bottom steel to provide structural continuity and to help span local irregularities. Footing excavations should be kept moist by regular sprinkling with water to prevent desiccation. It is essential that we observe the all footing excavations before reinforcing steel is placed.

We estimate that total foundation movement under static loads will be less than 1-inch, with post-construction differential movement of less than ½-inch across the channel.

Lateral loads may be resisted by friction between the footings and the supporting subgrade. A maximum allowable frictional resistance of 0.30 may be used for design. In addition, lateral resistance may be provided by passive pressure acting against foundations poured neat against competent soil. We recommend that an allowable passive pressure based on an equivalent fluid pressure of 200 pounds per cubic foot be used in design.

U-Frame Section Channel Foundations

A U-Frame Section Channel will be constructed under the Louis Road bridge. The invert of the U-Frame channel will be positioned up to 3 feet below the existing channel. A channel bottom slab or mat foundation which extends for the full width across the channel is being considered for support. We recommend that consideration of installation of weep holes, or subdrain system in the sides and bottom of the channel be considered to provide drainage and mitigate uplift of the U-Frame Section Channel.

The mat will be supported on about 24 inches of permeable material overlying native silty clays and sands. All mats may be designed for an average allowable bearing pressure of 2,500 pounds per square foot for dead plus live loads. The allowable bearing pressure may be increased by one-third for all loads including wind or seismic. These bearing values are net values; the weight of the mat can be neglected for design purposes.

Lateral load resistance will be developed by both friction at the base of the mat and passive earth pressure against its sides. A design coefficient friction of 0.30 can be assumed at the mat base. If additional resistance to siding is required, a passive equivalent fluid pressure of 300 pounds per cubic foot (pcf) should be assumed to act against the exterior side (outside of the channel), for 15-foot-high walls that can deflect about 1 to 3 inches at the top. If it is desirable to reduce wall deflection to negligible amounts, the resisting equivalent lateral soil pressure should not exceed 100 pcf.

DESIGN EARTH PRESSURES

Floodwalls, U-Frame Section Channel walls, and sloped side channel walls should be designed to resist static lateral earth pressures imposed by the adjacent backfill.

Lateral Earth Pressures

Any proposed retaining walls should be designed to resist lateral earth pressures from adjoining natural materials and/or backfill and from any surcharge loads. Provided that adequate drainage is provided as recommended, we recommend that walls restrained from movement at the top be designed to resist an equivalent fluid pressure of 45 pounds per cubic foot (pcf) plus a uniform pressure of 8H pounds per square foot, where H is the distance in feet between the top of the footing and the top of the wall. Such walls should also be designed to resist an additional uniform pressure equivalent to one-half of any surcharge loads applied at the surface. Any unrestrained retaining walls with adequate drainage should be designed to resist an equivalent fluid pressure of 45 pcf plus one-third of any surcharge loads.

The above lateral earth pressures assume level backfill conditions and sufficient drainage behind the walls to prevent any build-up of hydrostatic pressures from surface water infiltration and/or a rise in the ground water level. If adequate drainage is not provided, we recommend that an additional equivalent fluid pressure of 40 pcf be added to the values recommended above for both restrained and unrestrained walls. Surcharge loads, such as vehicular traffic, would apply additional loads to the walls. For design purposes, a surcharge pressure equivalent to 2 feet of soil should be applied to account for traffic loads.

The wall pressures recommended above are based on the assumption that no differential hydrostatic pressures will develop behind the retaining walls. The buildup of hydrostatic pressures behind the wall should be prevented by the inclusion of an adequate positive drainage system such as subdrains and/or weep holes. However, the permeable material behind the vertical U-Frame side walls should extend to a height of no more than 3 feet below finished grade.

Drainage

Adequate drainage may be provided by a subdrain system positioned behind the walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material of Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 1 feet out from the wall and to within 3 feet of the outside finished grade. Alternatively, ½-inch to ¾-inch drain rock may be used in place of the Class 2 Permeable Material provided the drain rock and pipe are enclosed in filter fabric, such as Mirafi 140N or equivalent. The upper 3 feet of wall backfill should consist of relatively impervious compacted on-site clayey soil. The subdrain outlet should be connected to a free-draining outlet or sump.

Miradrain, Geotech Drainage Panels, or Enkadrain drainage matting may be used for wall drainage as an alternative to the Class 2 Permeable Material or drain rock backfill. The drainage panel should be connected to the perforated drain pipe and/or weep holes at the base of the wall.

Backfill

Backfill placed behind the walls should be compacted to at least 90 percent relative compaction using light compaction equipment. If heavy compaction equipment is used, the walls should be temporarily braced.

Foundation Options for Louis Road Bridge

Two types of deep foundation options were considered for this project: 1) prestressed, precast concrete piles and 2) Cast In Drilled Hole (CIDH) piles. Based on our discussions with Biggs Cardosa Associates, CIDH piles may be preferable because installation of CIDH piles is a low displacement foundation system that will minimize disturbance of adjacent utilities. It is noted that ground water will be encountered during drilling. Therefore, stabilization of the drill hole with water, slurry, and/or casing will be necessary during construction.

Based upon the soil conditions encountered at the site in the exploratory borings, the CIDH piles will derive support primarily from skin friction. End bearing should be neglected. We recommend that CIDH piles should be at least 24 inches in diameter and spaced at least 3 diameters apart. A 24-inch diameter CIDH pile is recommended for the following reasons: 1) BCA has indicated that 24 inches is the smallest practical pile diameter to install from a structural viewpoint, 2) It is desirable from a constructability standpoint to keep piles to relatively short lengths to limit the size of the construction equipment and the lengths of rebar at the confined Louis Road working area, and 3) Due to the presence of ground water, from a constructability standpoint, larger diameter but shorter piles are easier to install than smaller diameter longer piles.

For design purposes, it is recommended that the CIDH piles extend at least 30 feet below the bottom of the pile cap for 45 ton piles, and 40 feet below the bottom of the pile cap for 70 ton piles. These recommendations are based on the assumption that the pile cap bottom is located no deeper than 5 feet from the existing or proposed ground surface. The indicated capacities are for dead plus live loads.

Post-construction settlements of CIDH pile foundations designed in accordance with the above recommendations are estimated to be less than ½-inch total and less than ¼-inch differential.

The ultimate capacity (F.S. = 1) of the CIDH piles are 90 and 140 tons, respectively. The project structural engineer should apply an appropriate factor-of-safety in accordance with Caltrans design procedure when estimating total capacity including seismic.

Lateral Load Resistance

The CIDH pile foundations recommended for support of the proposed bridge will also be capable of resisting lateral loads. The magnitude of the lateral load resistance is dependent upon many factors including the pile size and embedment length, conditions of pile cap fixity, the physical properties of the surrounding soils, the tolerable top deflection, and the yield moment capacity of the pile.

Lateral Load Characteristics were evaluated for both free and fixed pile head conditions. Free head pile boundary conditions are defined by a given lateral load and a zero moment at the pile head. In a free head pile, the pile head is free to deflect and form a non-vertical slope. Fixed head pile boundary conditions are defined by given a lateral load, and a zero rotation at the pile cap. The top of the fixed pile may horizontally deflect, however, the pile head is restrained to maintain a vertical orientation at the pile cap, thus a property of all fixed head piles is that the maximum moment occurs at the pile cap. Lateral loads were estimated using the computer program L-PILE Plus, written by Ensoft, Inc. It is estimated that the abutment piles will have the lateral load characteristics tabulated below.

TABLE 2. **Lateral Load Characteristics**

Pile Size (inches)	Pile Cap Fixity	Lateral Load Resistance (kips)	Estimated Top Deflection (inches)	Maximum Moment (foot-kips)	Depth to Maximum Moment (feet)
24	Free head	21	0.25	54	4.5
		27	0.5	72	4.5
24	Fixed head	40	0.11	171	@ Pile Cap

The above results represent the probable response of the piers under short-term loading conditions and include no factor-of-safety. Based on our discussions with BCA, short term seismic loading will govern the lateral design of the CIDH piles. The reason for this is that the superstructure of the bridge is designed as a continuous diaphragm member between the abutments, therefore, the long term static (service) load does not get transferred to the pile in any appreciable amount. Suitable factors of safety should be selected on the basis of the type of loading. A minimum compressive strength of 3,000 pounds per square inch was assumed for calculation of the concrete modulus. If pier stiffness varies by no more than 20 percent of that reported above, load deflection characteristics may be approximated by multiplying the deflection values by the ratio of the pier stiffness (EI). The response of piers with significantly different stiffnesses should be evaluated by us.

The lateral load resistance characteristics listed above are based on the assumption that 1) the heads of the piles (bottom of pile caps) will be positioned at a depth of about 5 feet below existing ground surface, and 2) that the heads of the piles be positioned at a horizontal distance of at least three diameters from the face of the channel. If the horizontal distance is less than three diameters, the lateral load resistance characteristics should be re-evaluated by the geotechnical engineer.

If additional lateral load resistance is required, passive pressure can be assumed to act against the face of the pile caps and abutment walls where the concrete will be placed neat against compacted engineered fill or stiff native clay soils. If desired, design parameters for resistance to lateral loads acting from the channel toward the approach embankments and also resistance to lateral loads acting toward the channel can be provided by the geotechnical engineer. The magnitude of resistance will depend on a number of factors, including the final location of the abutment and proximity of the electrical conduit trench.

Pile Installation

All piles should be installed under the direct observation of a geotechnical engineer. The bottoms of CIDH pile excavations should be reasonably clean and free of loose soil before reinforcing steel is installed and concrete is placed. We recommend that a flat bottom clean-out bucket be used to remove as much disturbed soil as possible from the bottom of the excavation.

The contractor should anticipate encountering ground water during pier excavation. Due to the high ground water level and the possibility of encountering layers of saturated sand, casing or placement of drilling fluid in each shaft may be necessary. If water cannot be removed from excavations prior to concrete placement, then concrete will need to be placed by tremie pipe. The concrete should be tremied to the bottom of the hole keeping the tremie pipe below the surface of the concrete to avoid entrapment of water in concrete. As concrete is placed , water is displaced out of the hole.

FEMA Floodwall System Forms

The geotechnical aspects of the FEMA floodwall system analyses form is included as Appendix C. The geotechnical engineer should review the mitigation plans during design and revise the forms as necessary.

Utilities

Sanitary sewers, telephone lines, storm drains, natural gas pipelines, and water supply pipelines are located in the creek vicinity at various locations along the project route. In particular, a 12-inch-diameter concrete sanitary sewer is located 2 to 5 feet from the edge of the existing channel lining along the northwest creek bank. All utilities should be accurately located in the field prior to construction and contingency plans made to accommodate unanticipated conditions. It may, for example, be necessary to either relocate the sanitary sewer line discussed above at certain locations or to implement an alternative floodwall foundation scheme in areas of interference.

Bottom Heave

This type of failure occurs in soft clays when the bearing pressure on the sides of the excavation exceeds the bearing capacity of the soil at the base of the excavation. A failure of this type results in bottom upheaval and settlements of the surrounding ground surface which may damage existing nearby structures. Based on our analysis, bottom heave is not anticipated for excavations 15 feet deep or less.

Scour/Erosion Considerations

The side slopes and bottom of the existing and improved creek flow channel will be concrete lined. If the connection between floodwalls and channel side slopes is covered by means of a continuous concrete apron, then protection against scour or erosion along the channel is provided. Additionally, we recommend that the outside edge of the floodwalls be protected with a concrete apron to prevent scour if the floodwalls are designed to be "brim full."

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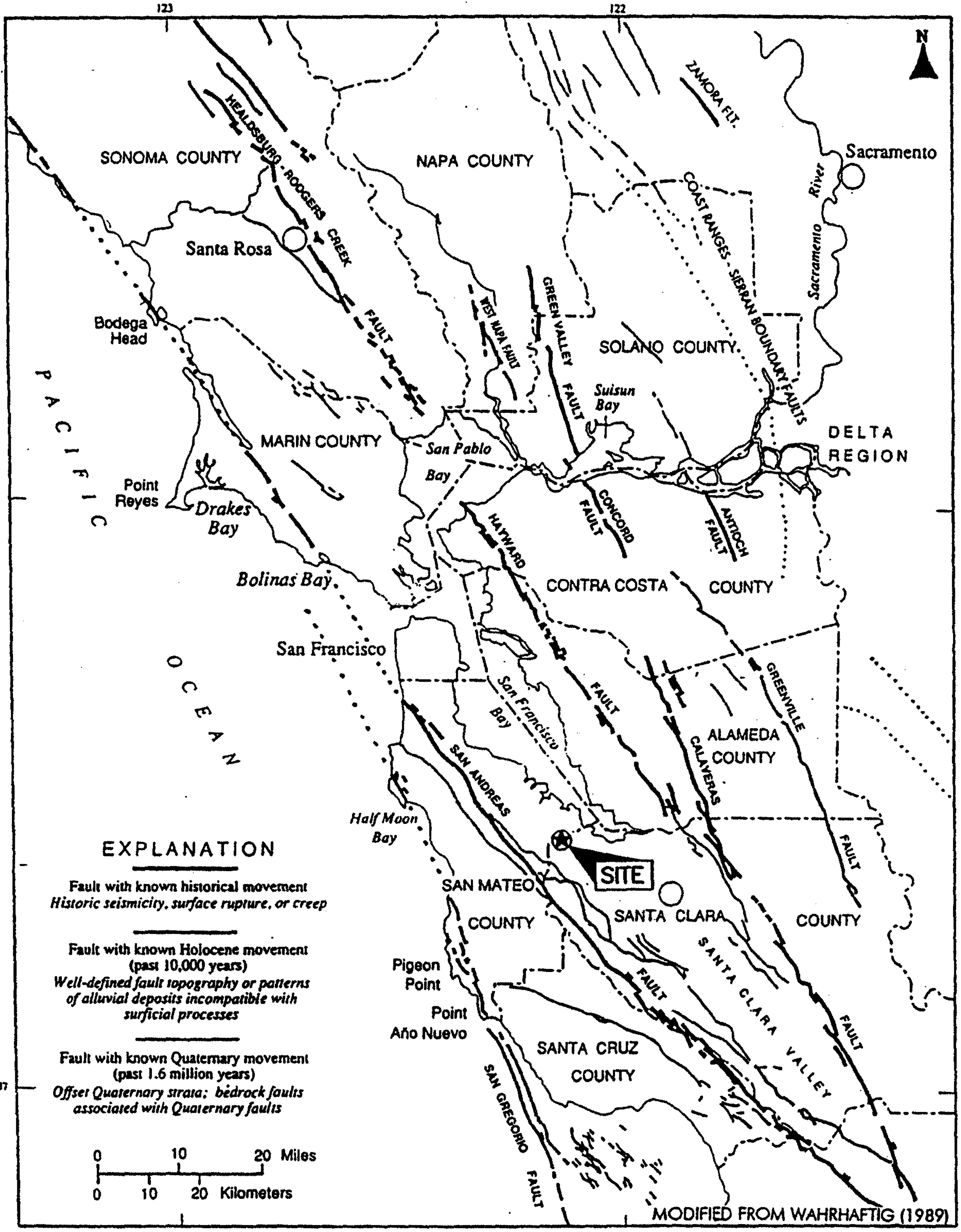
Figures



9/99·TE

REGIONAL FAULT MAP

MATADERO CREEK REMEDIATION PROJECT

Mountain View, California

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Environmental/Geotechnical/Engineering Services

FIGURE 3

1453–1

Appendix A

APPENDIX A
FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using a truck-mounted, hollow-stem auger. Eleven 8-inch-diameter exploratory borings were drilled between June 8 and 11, 1999, to a maximum depth of 31.5 feet. The approximate locations of the exploratory borings are shown on the Site Plan, Figure 2. The soils encountered were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). The logs of the borings, as well as a key to the classification of the soil, are included as part of this appendix.

The locations of borings were approximately determined by metered wheel from existing site boundaries. Elevations of the borings were determined by Schaaf and Wheeler by interpolation from plan contours. The locations and elevations of the borings should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. The standard penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The 2-inch O.D. split spoon sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration (ASTM D1586). In addition, 2.5-inch I.D. samples were obtained using a Modified California Sampler driven into the soil with the 140-pound hammer previously described. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows required to drive the last 12 inches. The various samplers are denoted at the appropriate depth on the boring logs and symbolized as shown on Figure A-1.

Field tests included an evaluation of the undrained shear strength of soil samples using a Torvane device, and the unconfined compressive strength of the soil samples using a pocket penetrometer device. The results of these tests are presented on the individual boring logs at the appropriate sample depths.

The attached boring logs and related information depict subsurface conditions only at the locations indicated and at the particular date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition, any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

* * * * * * * * *

PRIMARY DIVISIONS			SOIL TYPE		SECONDARY DIVISIONS
COARSE GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (Less than 5% Fines)	GW	●	Well graded gravels, gravel–sand mixtures, little or no fines
			GP	○	Poorly graded gravels or gravel–sand mixtures, little or no fines
		GRAVEL WITH FINES	GM	○	Silty gravels, gravel–sand–silt mixtures, plastic fines
			GC	▨	Clayey gravels, gravel–sand–clay mixtures, plastic fines
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (Less than 5% Fines)	SW	⁘	Well graded sands, gravelly sands, little or no fines
			SP	⁚	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH FINES	SM	⁞	Silty sands, sand–silt–mixtures, non-plastic fines
			SC	▨	Clayey sands, sand–clay mixtures, plastic fines
FINE GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT IS LESS THAN 50 %		ML	▥	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	▨	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	☰	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS LIQUID LIMIT IS GREATER THAN 50 %		MH	▥	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	▨	Inorganic clays of high plasticity, fat clays
			OH	≋	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			PT	⩛	Peat and other highly organic soils

DEFINITION OF TERMS

U.S. STANDARD SIEVE SIZE: 200 40 10 4
CLEAR SQUARE SIEVE OPENINGS: 3/4" 3" 12"

SILTS AND CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

GRAIN SIZES

☒ TERZAGHI SPLIT SPOON STANDARD PENETRATION

⧗ MODIFIED CALIFORNIA

▯ D & M UNDERWATER SAMPLER

■ SHELBY TUBE

○ NO RECOVERY

SAMPLERS

SAND AND GRAVEL	BLOWS/FOOT*
VERY LOOSE	0–4
LOOSE	4–10
MEDIUM DENSE	10–30
DENSE	30–50
VERY DENSE	OVER 50

RELATIVE DENSITY

SILTS AND CLAYS	STRENGTH+	BLOWS/FOOT*
VERY SOFT	0–1/4	0–2
SOFT	1/4–1/2	2–4
MEDIUM STIFF	1/2–1	4–8
STIFF	1–2	8–16
VERY STIFF	2–4	16–32
HARD	OVER 4	OVER 32

CONSISTENCY

*Number of blows of 140 pound hammer falling 30 inches to drive a 2–inch O.D. (1–3/8 inch I.D.) split spoon (ASTM D–1586).
+Unconfined compressive strength in tons/sq.ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D–1586), pocket penetrometer, torvane, or visual observation.

KEY TO EXPLORATORY BORING LOGS

Unified Soil Classification System (ASTM D–2487)

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FIGURE A–1

EXPLORATORY BORING: LA-1

Sheet 1 of 1

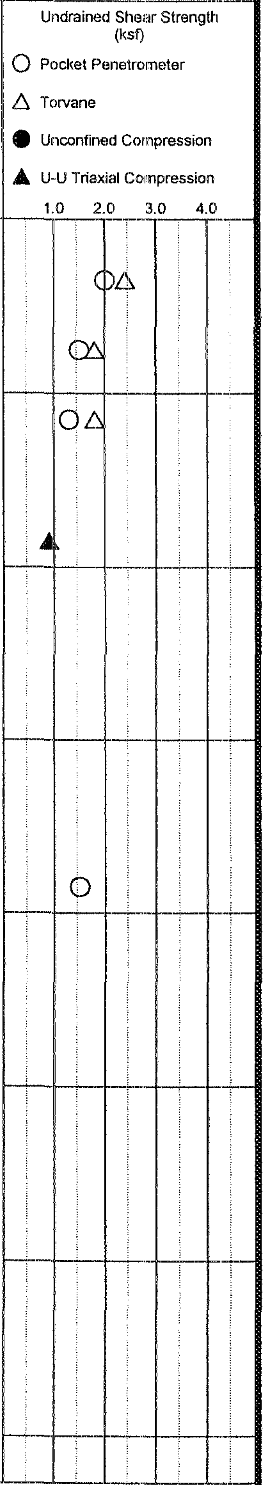
DRILL RIG: MOBILE B-40	PROJECT NO: 1453-1
BORING TYPE: 8" HOLLOW STEM	PROJECT: MATADERO CREEK
LOGGED BY: DGB	LOCATION: PALO ALTO, CA
START DATE: 6-8-99 FINISH DATE: 6-8-99	COMPLETION DEPTH: 30.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 6.1 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
6.1	0		SILTY CLAY (CL) [FILL] Stiff, moist, brown, mottled light brown, trace gravel to 3/4-inch diameter, trace fine sand	CL	13	⧓	26	100	
					10	⧓	25	94	
0.6	5		SILTY CLAY (CL) Stiff, moist, dark brown, trace sand, trace gravel to 1/2-inch diameter	CL	14	⧓	39	79	
					12	⧓	26	102	
	10								
			gravelly sand (SP) lense at 13 feet approximately 1-foot-thick						
	15				8	⧖	25		
					10	⧓	30	94	
	20								
-15.9			SANDY CLAY (CL) Stiff, wet, fine sand, trace rounded gravel to 1/2-inch diameter, sand lens in sample	CL	13	⧓	21	109	
	25		Increasing Sand						
-21.9			GRAVELLY SAND (SP) Very dense, wet, fine to coarse grained sand.	SP	48	⧖	13		
-23.9	30		Bottom of Boring at 30 feet						
	35								



GROUND WATER OBSERVATIONS:

∇ : FREE GROUND WATER MEASURED DURING DRILLING AT 12.0 FEET

▼ : FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 10.4 FEET

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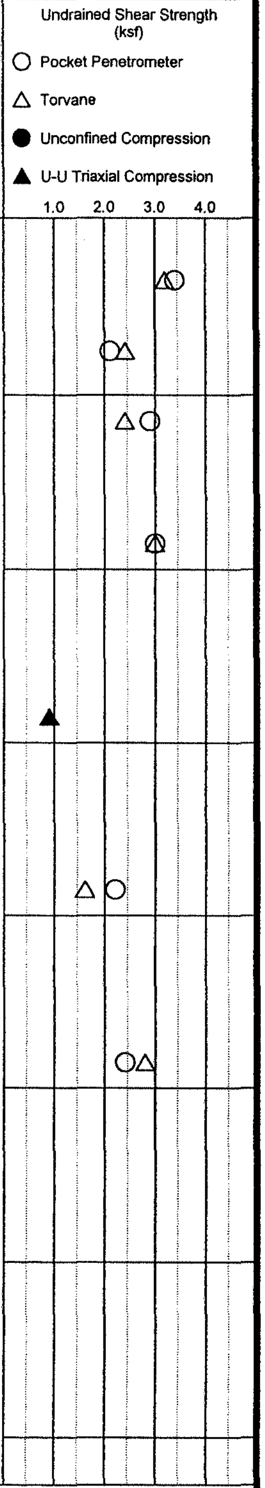
EXPLORATORY BORING: LA-2

Sheet 1 of 1

DRILL RIG: MOBILE B-40	PROJECT NO: 1453-1
BORING TYPE: 8" HOLLOW STEM	PROJECT: MATADERO CREEK
LOGGED BY: DGB	LOCATION: PALO ALTO, CA
START DATE: 6-8-99 FINISH DATE: 6-8-99	COMPLETION DEPTH: 25.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS SURFACE ELEVATION: 5.5 FT. (+/-)	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
5.5	0	▩	Aggregate Base [FILL]	GM					
4.5		▩	SILTY CLAY (CL) [FILL] Stiff, moist, dark brown, fine to coarse grained sand, trace gravel to 1/2"	CL	29	⧗	14	111	
					27	⧗	25	91	
0.5	5	▨	SILTY CLAY (CL) Stiff, moist, dark brown, mottled white, trace claystone fragments		19	⧗	23	98	
	▼		becomes reddish-brown, mottled gray						
	10				24	⧗	20	105	
	▽								
					14	⧗	26	100	
	15			CL					
					16	⧗	33	91	
	20								
					17	⧗	23	104	
-19.5	25		Bottom of Boring at 25 feet						
	30								
	35								



GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 13.5 FEET

▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 7.5 FEET

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EXPLORATORY BORING: LA-3

Sheet 1 of 1

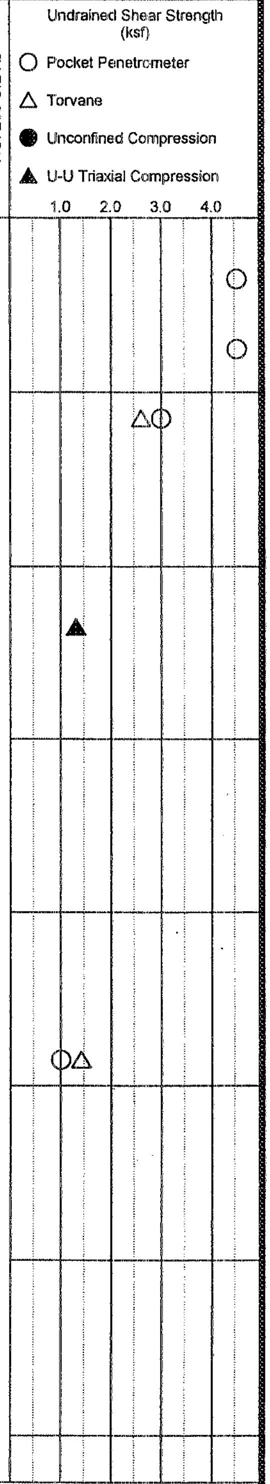
DRILL RIG: MOBILE B-40	PROJECT NO: 1453-1
BORING TYPE: 8" HOLLOW STEM	PROJECT: MATADERO CREEK
LOGGED BY: DGB	LOCATION: PALO ALTO, CA
START DATE: 6-8-99 FINISH DATE: 6-8-99	COMPLETION DEPTH: 30.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 6.7 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
6.7	0	▩	SILTY CLAY (CL) [FILL] Stiff, moist, dark brown, fine to coarse sand, trace gravel, moderate plasticity	CL	21	⧓	20	99	
					20	⧓	22	100	
1.7	5	▨	SILTY CLAY (CL) Very stiff, moist, dark brown, mottled white, trace claystone fragments		28	⧓	31	90	
				CL	27	⧓	21	105	
	▼ 10								
					21	⧓	23	104	
-6.8		░	SAND (SP) Medium dense, wet, yellowish brown, fine grained sand		22	⧓	22	110	
	15								
				SP					
					52	⧓	13		
	20		becomes dense						
-14.8		▨	SILTY CLAY (CL) Stiff, wet, yellowish brown, mottled white, some claystone inclusions, trace fine sand, moderate plasticity.		8	⧖	37	87	
	25								
			gravelly sand (SP) lense at 26 feet approximately 2-feet-thick	CL					
					11	⧓	27	96	
-23.3	30		Bottom of Boring at 30 feet						
	35								



GROUND WATER OBSERVATIONS:

▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 10.2 FEET

EXPLORATORY BORING: LA-4

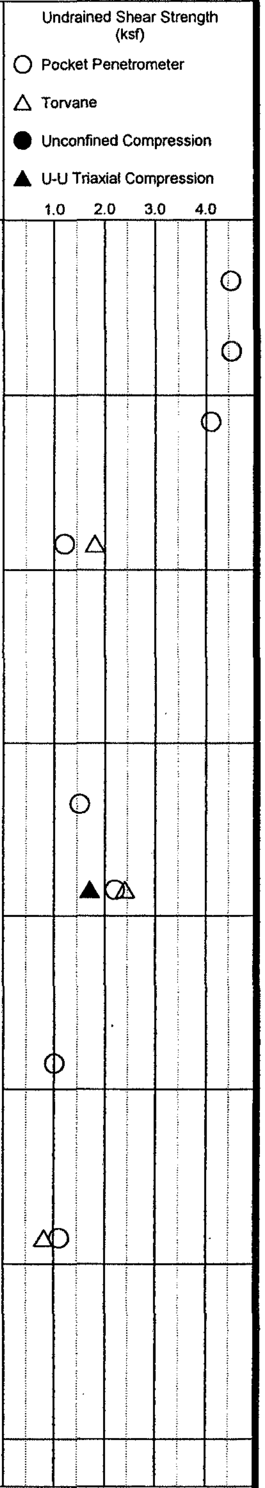
Sheet 1 of 1

DRILL RIG: MOBILE B-40	PROJECT NO: 1453-1
BORING TYPE: 8" HOLLOW STEM	PROJECT: MATADERO CREEK
LOGGED BY: EMG	LOCATION: PALO ALTO, CA
START DATE: 6-9-99 FINISH DATE: 6-9-99	COMPLETION DEPTH: 30.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

SURFACE ELEVATION: 9.8 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
9.8	0	SILTY CLAY (CL-CH) [FILL] Stiff to very stiff, moist, brown to dark brown, trace fine to coarse sands, moderate to high plasticity.	CH	21	22	86	
				23	20	82	
4.8	5	SILTY CLAY (CL-CH) Stiff to very stiff, moist, dark brown, mottled white	CH	22	26	92	
1.8		SILTY CLAY (CL) Stiff, moist, light brown, trace sand and gravel	CL	13	21	95	
	▽ 10						
		becomes brown, mottled reddish-brown and gray Liquid Limit = 37, Plasticity Index = 17		9	28		
		sand lense at 14 feet approximately 1- to 2-feet-thick		11	33		
	15						
		becomes olive brown		24	25	100	
				26	26	101	
	20	becomes dark brown					
				15			
	25						
-18.2		SANDY CLAY (CL) Stiff, moist, bluish gray, fine to medium sand	CL	19	29	97	
-20.2	30	Bottom of Boring at 30 feet					
	35						



GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 10.5 FEET

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EXPLORATORY BORING: LA-5

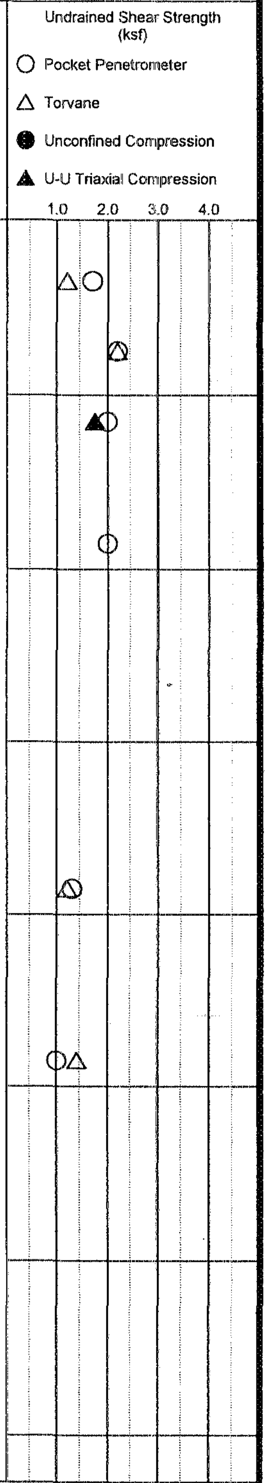
Sheet 1 of 1

DRILL RIG: MOBILE B-40	PROJECT NO: 1453-1
BORING TYPE: 8" HOLLOW STEM	PROJECT: MATADERO CREEK
LOGGED BY: EMG	LOCATION: PALO ALTO, CA
START DATE: 6-9-99 FINISH DATE: 6-9-99	COMPLETION DEPTH: 30.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

SURFACE ELEVATION: 11.2 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
11.2	0	SILTY CLAY (CL) [FILL] Stiff, moist, brown, trace to some fine and medium sands, moderate plasticity.	CL	11	26	97	
7.7		SILTY CLAY (CL-CH) Very stiff, moist, dark brown, trace sands, moderate to high plasticity	CL-CH	22	40	78	
5.7	5	SILTY CLAY (CL) Stiff to very stiff, moist, light gray, mottled orange	CL	21	32	91	
	10			30	13	120	
0.2		SAND (SP-SC) Medium dense, wet, brown, fine to coarse grained sands	SP-SC	28	12		
				21	27	102	
-3.3	15	SILTY CLAY (CL) Stiff, moist, brown, mottled orange, trace fine sands clayey sand (SC) lense at 16 1/2 feet	CL	11	29	103	
				18	6	111	
	20	sand lense at 22 feet approximately 1-foot-thick					
-10.8		SILTY CLAY (CL) Stiff, moist, brown, mottled orange, trace fine sand	CL	22	25	102	
	25						
				30	26	100	
-18.8	30	Bottom of Boring at 30 feet					
	35						



GROUND WATER OBSERVATIONS:

▽ : FREE GROUND WATER MEASURED DURING DRILLING AT 9.0 FEET

▼ : FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 8.2 FEET

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EXPLORATORY BORING: LA-6

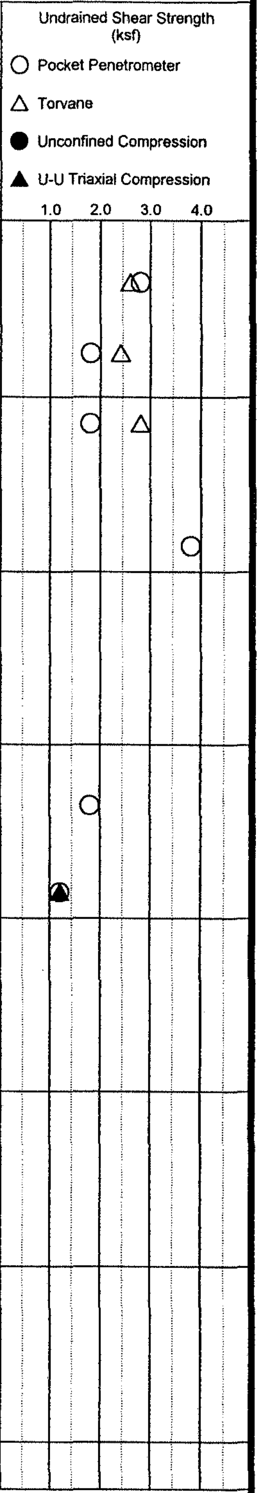
Sheet 1 of 1

DRILL RIG: MOBILE B-40
BORING TYPE: 8" HOLLOW STEM
LOGGED BY: EMG
START DATE: 6-10-99 FINISH DATE: 6-10-99

PROJECT NO: 1453-1
PROJECT: MATADERO CREEK
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 30.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS SURFACE ELEVATION: 12.5 FT. (+/-)	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
12.5	0	SILTY CLAY (CL) [FILL] Very stiff, moist, brown to dark brown, some fine to medium sand	CL	17	25	94	
				21	37	78	
8.5	5	SILTY CLAY (CL-CH) [FILL] Stiff, moist, dark brown, trace sands and wood chunks, moderate to high plasticity	CL-CH	27	36	85	
4.0 ▽	10	SILTY CLAY (CL) Hard, wet, light brown, trace to some sand, trace to some subangular gravel	CL	45	11	109	
2.0		SAND TO CLAYEY SAND (SP-SC) Dense, wet, brown, fine to coarse grained sand, trace subangular and angular graveL	SP-SC	30	12		
-1.5	15	SILTY CLAY (CL) Stiff, moist, brown, mottled orange	CL	14	15		
				12			
				10	33	89	
	20	becomes light brown, mottled white, trace sand and gravel					
				28	16	111	
-12.0	25	SAND TO CLAYEY SAND (SP-SC) Medium dense, wet, brown, fine to coarse sand, trace fine to coarse gravel	SP-SC	23	22		
-16.0		SANDY CLAY (CL) Stiff, moist, brown, mottled orange, fine to medium sand	CL	11	24		
-17.5	30	Bottom of Boring at 30 feet					
	35						



GROUND WATER OBSERVATIONS:
▽: FREE GROUND WATER MEASURED DURING DRILLING AT 9.0 FEET

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EXPLORATORY BORING: LA-7

Sheet 1 of 1

DRILL RIG: MOBILE B-40
BORING TYPE: 8" HOLLOW STEM
LOGGED BY: EMG
START DATE: 6-9-99 FINISH DATE: 6-9-99

PROJECT NO: 1453-1
PROJECT: MATADERO CREEK
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 30.0 FT.

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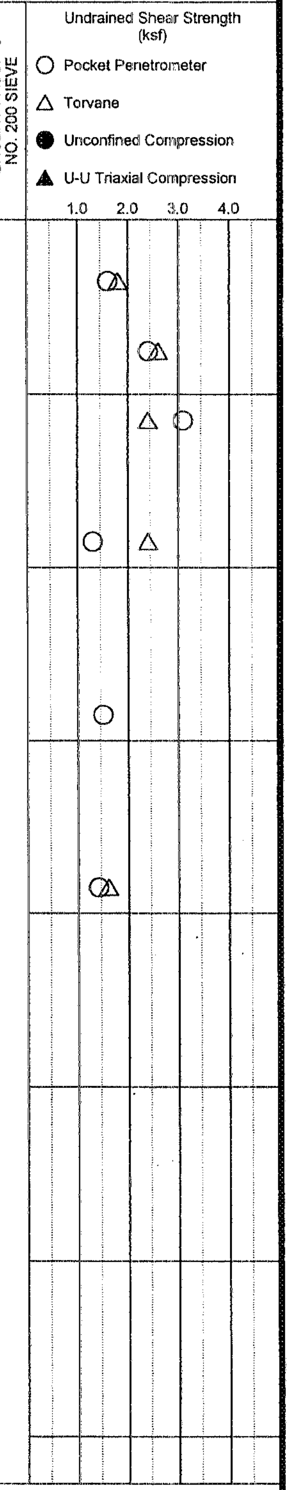
MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 16.3 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
16.3	0	SILTY CLAY (CL) [FILL] Stiff, moist, brown to dark brown, trace to some fine and medium sands, moderate plasticity	CL	14	15	103	
12.8	5	SILTY CLAY (CH) Very stiff, moist, dark brown, trace fine to medium sand Liquid Limit = 73, Plasticity Index = 49	CH	26 29	33 20	96 107	
10.3	10	SILTY CLAY (CL) Very stiff, moist, brown, mottled light gray	CL	18	18		
5.3		SAND TO CLAYEY SAND (SP-SC) Medium dense, wet, brown, fine to coarse grained sands	SP-SC	19 15	15 22		
1.8	15 20	SILTY CLAY (CL) Stiff, moist, brown to olive brown, mottled orange, trace sands	CL	12 16	26 29	 94	
-7.7	25	GRAVELLY SAND (SP) Medium dense, wet, brown, fine to coarse grained sands, trace fines. becomes dense	SP	20 42	16 14		
-13.7	30 35	Bottom of Boring at 30 feet					



GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 11.0 FEET
▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 10.6 FEET

LA CORP.GDT 9/27/99 mv*

EXPLORATORY BORING: LA-8

Sheet 1 of 1

DRILL RIG: MOBILE B-53	PROJECT NO: 1453-1
BORING TYPE: 8" HOLLOW STEM	PROJECT: MATADERO CREEK
LOGGED BY: EMG	LOCATION: PALO ALTO, CA
START DATE: 6-11-99 FINISH DATE: 6-11-99	COMPLETION DEPTH: 31.5 FT.

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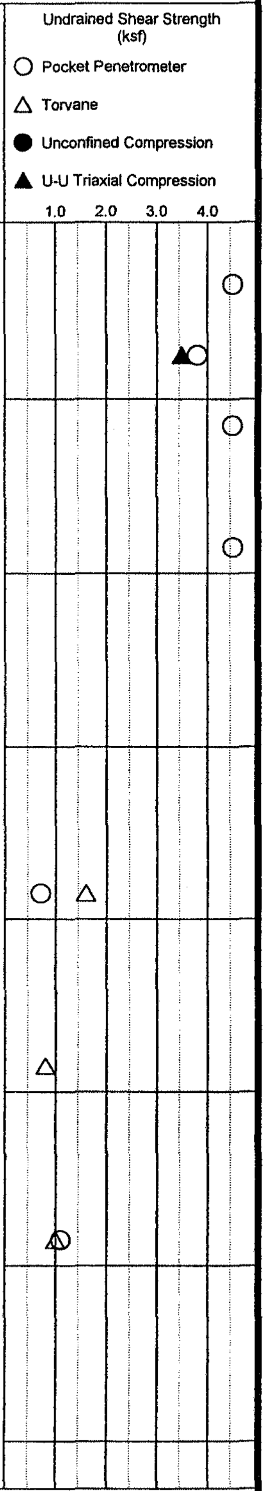
MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 19.8 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
19.8	0	SILTY CLAY (CL) [FILL] Very stiff, moist, brown to dark brown, trace rootlets, low to moderate plasticity.	CL	38	24	93	
17.3		SILTY CLAY (CL-CH) Very stiff, moist, brown to dark brown, trace sands, moderate to high plasticity.	CL-CH	45	20	108	
14.3	5	SANDY CLAY W/GRAVEL (CL) Hard, moist, brown, fine to coarse sand, fine gravel	CL	55 69 38	13 9 12	116	
6.8	10	GRAVELLY SAND-CLAYEY SAND (SP-SC) Very dense, wet, brown, fine to coarse sand	SP-SC	69	29		
3.3	15	SILTY CLAY (CL) Medium stiff, wet, brown, mottled orange, trace sands	CL	28 17	34 29	90 91	
-8.7	20 25	SILTY CLAY (CL) Very stiff, moist, greenish brown, trace fine sand clayey sand (SC) lense at 29 feet approximately 1-foot-thick	CL	69 28	23 31	103	
-11.7	30 35	Bottom of Boring at 31½ feet					



GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 13.0 FEET

▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 11.5 FEET

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EXPLORATORY BORING: LA-9

Sheet 1 of 1

DRILL RIG: MOBILE B-40
BORING TYPE: 8" HOLLOW STEM
LOGGED BY: EMG
START DATE: 6-10-99 FINISH DATE: 6-10-99

PROJECT NO: 1453-1
PROJECT: MATADERO CREEK
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 30.0 FT.

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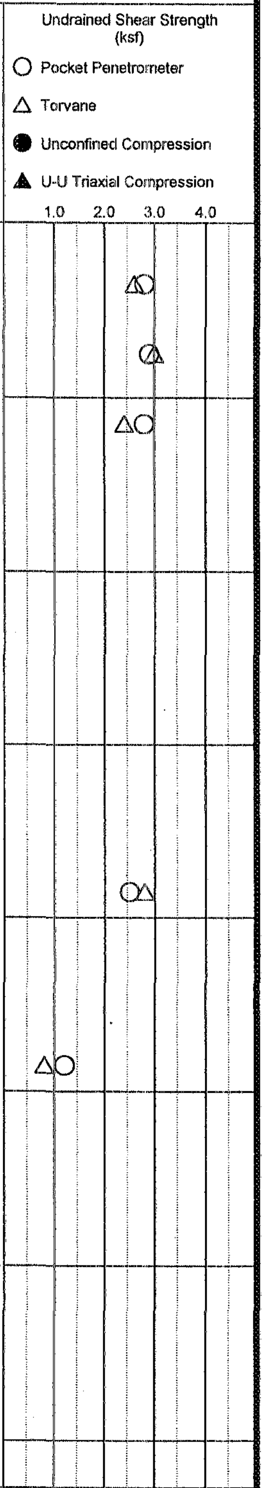
ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS SURFACE ELEVATION: 22.1 FT. (+/-)	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
22.1	0	SILTY CLAY (CL) [FILL] Very stiff, moist, brown, trace rootlets, fine sands, moderate plasticity	CL	25	⧗	30	86	
19.1		SILTY CLAY (CL-CH) Very stiff, moist, dark brown, moderate to high plasticity	CL-CH	39	⧗	29	96	
	5			21	⧗	27	95	
13.6	10	GRAVELLY SAND (SP) Very dense, moist, brown, fine to coarse sands, fine gravel, trace clay	SP	58	⧗	15		
	▼			60	⧖	6		
	15	becomes medium dense, increase in silt content		11	⧖	14		
6.1		SILTY CLAY (CL) Stiff, wet, brown, mottled orange, trace sands	CL	13	⧖	23	102	
	20	becomes very stiff, brown, mottled white		31	⧗	25	101	
-1.4	25	SANDY CLAY (CL) Stiff, moist, brown, light gray mottles, low plasticity.	CL	19	⧗	24	101	
-6.4		SILTY SAND (SM) Dense, moist, brown, fine to medium sand, trace to some fine to medium gravel	SM	36	⧖	32		
-7.9	30	Bottom of Boring at 30 feet						
	35							



GROUND WATER OBSERVATIONS:
▽: FREE GROUND WATER MEASURED DURING DRILLING AT 13.0 FEET
▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 13.2 FEET

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EXPLORATORY BORING: LA-10

Sheet 1 of 1

DRILL RIG: MOBILE B-53
BORING TYPE: 8" HOLLOW STEM
LOGGED BY: EMG
START DATE: 6-11-99 FINISH DATE: 6-11-99

PROJECT NO: 1453-1
PROJECT: MATADERO CREEK
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 30.0 FT.

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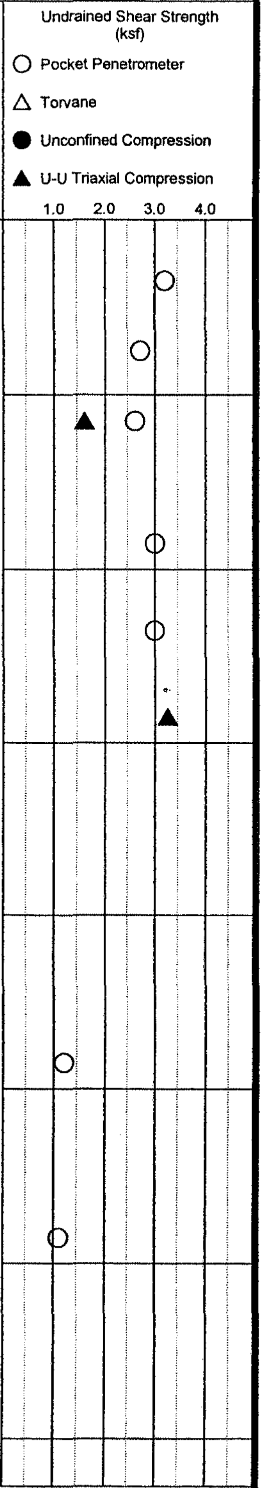
MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 23.5 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
23.5	0		SILTY CLAY (CL) [FILL] Stiff, moist, dark brown, trace rootlets, trace fine sand, moderate plasticity	CL	23		31	93	
					27		31	93	
	5				41		29	96	
17.5			SILTY CLAY (CL) stiff, moist, brown, low to moderate plasticity						
			becomes gray, mottled brown	CH	52		20	109	
	10		Liquid Limit = 42, Plasticity Index = 23		65		21	106	
	15				58		19	112	
			becomes olive brown, trace fine sand						
7.5			SAND TO CLAYEY SAND (SP-SC) Dense, wet, brown, trace gravel, fine to coarse grained sands	SP-SC	51		13		
5.0			SILTY CLAY (CL) Stiff, moist, brown, mottled orange, trace fine to medium sands.	CL	13		23		
	20								
	25				24				
					27		28	96	
-6.5	30		Bottom of Boring at 30 feet						
	35								



GROUND WATER OBSERVATIONS:

∇: FREE GROUND WATER MEASURED DURING DRILLING AT 16.0 FEET

▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 13.5 FEET

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EXPLORATORY BORING: LA-11

Sheet 1 of 1

DRILL RIG: MOBILE B-40	PROJECT NO: 1453-1
BORING TYPE: 8" HOLLOW STEM	PROJECT: MATADERO CREEK
LOGGED BY: EMG	LOCATION: PALO ALTO, CA
START DATE: 6-10-99 FINISH DATE: 6-10-99	COMPLETION DEPTH: 30.0 FT.

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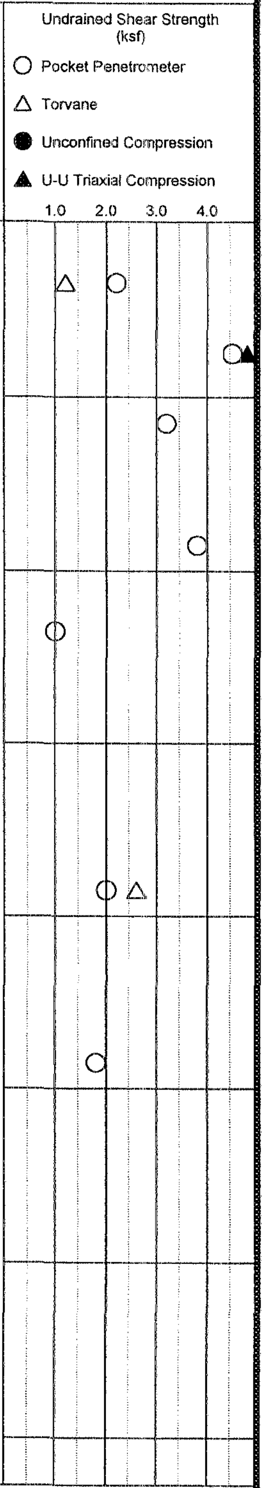
MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 24.3 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
24.3	0	9-1/2 inches of concrete over 2-1/2 inches of aggregate base	AB				
23.3		SILTY CLAY (CL-CH) [FILL] Hard, moist, dark brown, trace rootlets, trace fine sand, moderate to high plasticity Liquid Limit = 74, Plasticity Index = 58	CL-CH	33	25	93	
				35	25	98	
	5	becomes very stiff, brown		42	25	99	
16.3		SANDY CLAY (CL) Hard, moist, light gray, mottled orange, fine to medium sand	CL	55	20	108	
	10	becomes brown, mottled orange		13	25	100	
10.8		CLAYEY SAND (SC) Medium dense, wet, brown, fine to coarse sand, trace fine gravel	SC	20	26		
8.3	15	SILTY CLAY (CL) Stiff, moist, brown, mottled orange	CL	10	27		
				23	24	100	
	20			25	14	105	
-0.7	25	GRAVELLY SAND-CLAYEY SAND (SP-SC) Medium dense to dense, wet, brown, fine to coarse grained sands, subangular and angular gravel	SP-SC	47	11		
-5.7	30	Bottom of Boring at 30 feet					
	35						



GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 12.4 FEET

▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 13.2 FEET

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Appendix B

APPENDIX B
LABORATORY INVESTIGATION

The laboratory testing program was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site and to aid in verifying soil classification.

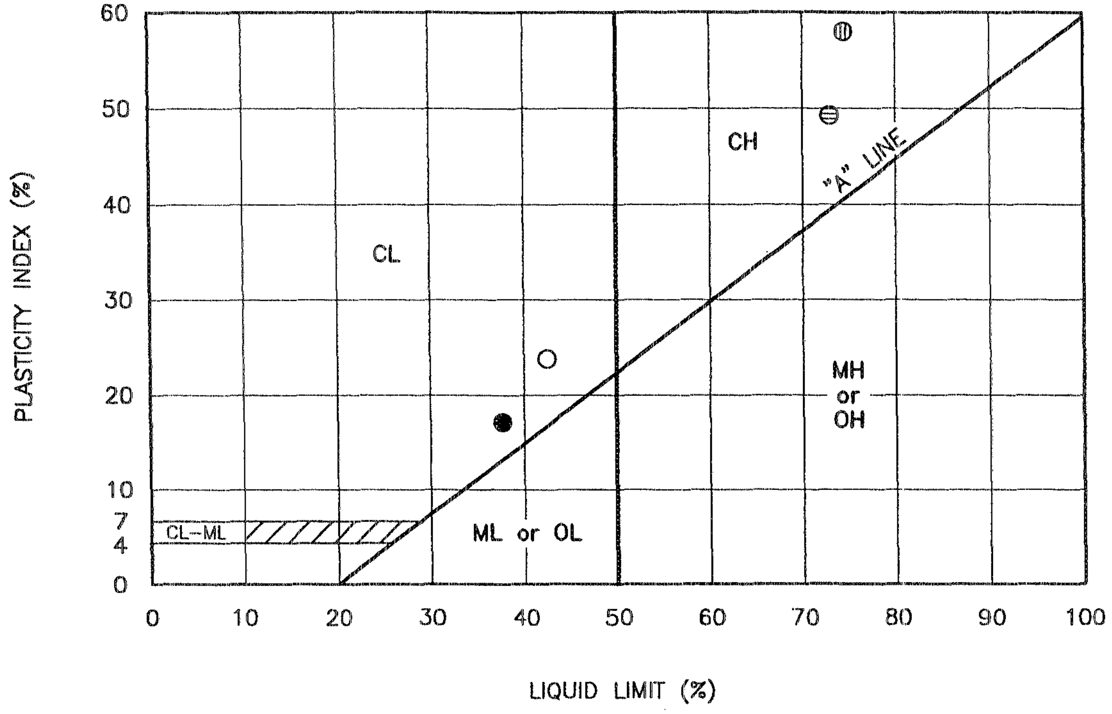
Moisture Content: The natural water content was determined (ASTM D2216) on 102 samples of the materials recovered from the borings. These water contents are recorded on the boring logs at the appropriate sample depths.

Dry Densities: In place dry density determinations (ASTM D2937) were performed on 73 samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Plasticity Index: Plasticity Index determinations (ASTM D4318) were performed on four samples of the subsurface soils to measure the range of water contents over which these materials exhibit plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of these tests are presented on Figure B-1 and on the logs of the borings at the appropriate sample depths.

Unconfined Compression: Unconfined compression tests (ASTM D2166) were performed on 10 undisturbed samples of the clayey subsurface soils to evaluate the undrained shear strengths of these materials. Samples tested had a diameter of 2.8 inches and a height-to-diameter ratio of at least 2. Failure was taken as the peak normal stress. Results of these tests are presented on the boring logs at the appropriate sample depths.

* * * * * * * * *



KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	NATURAL WATER CONTENT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	PASSING #200 SIEVE (%)	LIQUIDITY INDEX	UNIFIED SOIL CLASSIFICATION SYMBOL
●	LA–4/6	12	33	37	17	---	0.8	CL
⊖	LA–7/2	4	18	73	49	---	–0.1	CH
○	LA–10/6	12	19	42	23	---	0	CL
◍	LA–11/1	2	25	74	58	---	0.2	CH

PLASTICITY CHART AND DATA

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FIGURE B–1
1453–1

APPENDIX C

FEMA FLOODWALL SYSTEM FORMS

FEDERAL EMERGENCY MANAGEMENT AGENCY LEVEE/FLOODWALL SYSTEM ANALYSES FORM	O.M.B. Burden No. 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 3.0. hours per response. The burden estimate includes th time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Managemen Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwor Reduction Project (3067-0148), Washington, DC 20503.

Community Name: ____________________

Flooding Source: ____________________

Project Name/Identifier: ____________________

REACH TO BE REVISED

Downstream limit: ____________________

Upstream limit: ____________________

This Levee/Floodwall analysis is based on:

☐ upgrading of an existing levee/floodwall system
☐ a newly constructed levee/floodwall system
☐ reanalysis of an existing levee/floodwall system

LEVEE/FLOODWALL SYSTEM ELEMENTS

1. Levee elements and locations are:

☐ earthen embankment, dike, berm etc. Station ________ to ________
☐ structural floodwall Station ________ to ________
☐ other (describe) ____________ Station ________ to ________

Structural Type:

☐ monolithic cast-in place reinforced concrete
☐ reinforced concrete masonry block
☐ sheet piling
☐ other (describe) ____________________

2. Has this levee/floodwall system been certified by a Federal agency to provide protection against the 100-year flood event?

☐ Yes ☐ No

If yes, by which agency? ____________________

If yes, complete only the interior drainage section on pages 7 and 8 of this form and the operation and maintenance section of Revision Requestor and Community Official Form.

3. Attach certified drawings containing the following information (indicate drawing sheet numbers):

a. Plan of the levee embankment and floodwall structures. Sheet Numbers____________

b. A profile of the levee/floodwall system showing the 100-year water surface elevation, levee and/or wall crest and foundation, and closure locations for the total levee system. Sheet Numbers____________

c. A profile of the 100-year water surface elevation, closure opening outlet and inlet invert elevations, type and size of opening, and kind of closure device. Sheet Numbers____________

d. A layout detail for the embankment protection measures. Sheet Numbers____________

e. Location, layout, and size and shape of the levee embankment features, foundation treatment, floodwall structure, closure structures, and pump stations. Sheet Numbers____________

FREEBOARD

The minimum freeboard provided above the 100-year water surface elevation is:

Riverine

3.0 feet or more at the downstream end and throughout ☐ Yes ☐ No
3.5 feet or more at the upstream end ☐ Yes ☐ No
4.0 feet immediately upstream of all structures and constrictions ☐ Yes ☐ No

Coastal

1.0 foot above the height of the one percent wave for the 100-year stillwater surge elevation or maximum wave runup (whichever is greater). ☐ Yes ☐ No

2.0 feet above 100-year stillwater surge elevation ☐ Yes ☐ No

Please note, occasionally exceptions are made to the minimum freeboard requirement. If an exception is requested, attach documentation addressing Part 65.10 (b) (1) (ii) of the National Flood Insurance Program regulations.

If no is answered to any of the above, please explain where and why:________________________

____

2. Tabulate the elevations at critical locations (tabulate values at each levee crest grade change)

Station	Location	100-Year Water Surface Elevation	Levee Crest	Freeboard (ft.)
	Upper end			
	Lower end			

(Extend table on an added sheet as needed and reference)

SEDIMENT TRANSPORT CONSIDERATIONS

1. A. Is there any indication from historical records that sediment transport (including scour and deposition) can affect the 100-year water surface elevations?

☐ Yes ☐ No

B. Based on the conditions (such as geomorphology, vegetative cover and development of the watershed and stream bed, and bank conditions), is there a potential for debris and sediment transport (including scour and deposition) to affect the 100-year water surface elevations and/or the freeboard for the levee/floodwall?

☐ Yes ☐ No

2. If the answer to either 1A or 1B is yes:

A. What is the estimated sediment (bed material) load?

_______cfs (attach gradation curve)

Explain method used to estimate the sediment transport and the depth of scour and/or deposition

____

____

____

____

____

B. Will sediment accumulate anywhere along the levee/floodwall (such as along any bends in the channel)?

☐ Yes ☐ No

If yes, what is the minimum freeboard at these locations?__________________feet.

CLOSURES

Openings through the levee system:

☐ exist ☐ do not exist

If openings exist, list all closures:

Channel Station	Left or Right Bank	Opening Type	Highest Elevation for Opening Invert	Type of Closure Device

(Extend table on an added sheet as neded and reference)

Geotechnical and geologic data:

In addition to the required detail analysis reports, data obtained during field and laboratory investigations and used in the design analysis for the following levee system features should be submitted in a tabulated summary form. (Reference U.S. Army Corps of Engineers EM-1110-2-1906 Form 2086)

EMBANKMENT PROTECTION

1. The maximum levee slope landside is____

2. The maximum levee slope floodside is____

3. The range of 100-year riverine flood velocities along the levee?_________________________(min.) to____________________(max.)

4. Embankment material is protected by (describe the kind):______________________________

5. Riprap Design Parameters: (Include references) ☐ Velocity; ☐ Tractive stress

Reach	Sideslope	Flow depth	Velocity	Curve or Straight	Stone Riprap			Depth of Toedown
					D_{100}	D_{50}	Thickness	
Sta______to______								
Sta______to______								
Sta______to______								

(Extend table on an added sheet as needed and reference)

6. Has a bedding/filter analysis and design been included ☐ Yes ☐ No

Describe the analysis used for other kinds of protection used (include copies of the design analysis).

Note: Attach engineering analysis to support construction plans.

EMBANKMENT AND FOUNDATION STABILITY

1. **Describe the basis for selection of critical location for analysis:

☐ Overall height: Sta________________, height____________________ft.

☐ Limiting foundation soil strength:

Sta____________________, depth____________________to____________________

strength Ø = ____________degrees, c = ________________psf

☐ slope: SS = ______________(h) to ________________(v)

(Repeat as needed on an added sheet for additional locations)

2. **Specify the embankment stability analyses methodology used (e.g. circular arc, sliding block, infinite slope, etc.):____

____

3. **Summary of stability analysis results:

Case	Loading Conditions	Critical Safety Factor	Criteria (Min.)
I	End of construction	____________	1.3
II	Sudden drawdown	____________	1.0
III	Critical flood stage	____________	1.4
IV	Steady seepage at flood stage	____________	1.4
VI	Earthquake (Case I or III)	____________	1.0

(Reference: U.S. Army Corps of Engineers EM-1110-2-1913 Table 6-1)

4. **Was a seepage analysis for the embankment performed? ☐ Yes ☐ No

Describe methodology used:____

____

5. **Was a seepage analysis for the foundation performed? ☐ Yes ☐ No

Were uplift pressures at the embankment landside toe checked? ☐ Yes ☐ No

Were seepage exit gradients checked for piping potential? ☐ Yes ☐ No

6. The duration of 100-year flood hydrograph against the embankment is____________Hrs.

Note: Attach engineering analysis to support construction plans.

**Analysis not performed because vertical floodwalls or U-Frame Section Channel is proposed to replace the existing sloped channel.

EMBANKMENT AND FOUNDATION STABILITY

1. **Describe analysis submittal based on Code:

☐ UBC (1988) or ☒ Other (specify) 1997 UBC for floodwall and U-Frame channel design.

2. **Stability analysis submitted provides for:

☐ Overturning; ☐ Sliding; If not, explain

3. Loading included in the analyses were:

☒ Lateral earth @ P_a = 45pcf + 8H psf; P_p = 300pcf ~~psf~~

☐ Surcharge--Slope @ , ☒ surface 90pcf + 8H psf

☐ Wind @ P_w = ** psf

☐ Seepage (Uplift); ☐ Earthquake @ P_{eq} = %g

☐ 100-year significant wave height ft.

☐ 100-year significant wave period sec.

Not Applicable

4. **Summary of Stability Analysis Results: Factors of Safety. Itemize for each range in site layout dimension and loading condition limitation for each respective reach.

Loading Condition	Criteria (Min)		Sta	To	Sta	To
	Overturn	Sliding	Overturn	Sliding	Overturn	Sliding
Dead & Wind	1.5	1.5				
Dead & Soil	1.5	1.5				
Dead, Soil, Flood & Impact	1.5	1.5				
Dead, Soil & Seismic	1.3	1.3				

(Ref: FEMA 114 Sept 1986; COE EM 1110-2-2502)

(Note: Extend table on an added sheet as needed and reference)

5. Foundation bearing strength for each soil type: **See geotechnical report for drilled pier parameters for floodwalls.

Bearing Pressure for U-Frame sections	Sustained Load	Short Term Load
Computed design maximum	2,500 psf	1/3 increase psf
Maximum allowable	N/A psf	N/A psf

6. Foundation scour protection ☒ is, ☐ is not provided, (describe)

concrete apron

Note: Attach engineering analysis to support construction plans.

**Should be performed by the Structural Engineer.

SETTLEMENT

1. Anticipated potential settlement has been determined and incorporated into the specified construction elevations to maintain the established freeboard margin.
☒ Yes ☐ No

2. The computed range of settlement is 1/2-inch ft. to 1-inch ft.

3. Settlement of the levee crest is determined to be primarily from:

☐ Foundation consolidation
☐ Embankment compression
☒ Other (describe) Mobilization of skin friction and settlement of mat foundations.

4. Differential settlement of floodwalls

☐ has ☐ has not been accommodated in the structural design and construction.

Note: Attach engineering analysis to support construction plans.

INTERIOR DRAINAGE

1. Specify size of each interior watershed

Draining to pressure conduit ____________
Draining to ponding area ____________

2. Relationships Established

Ponding elevation vs. storage	☐ Yes ☐ No
Ponding elevation vs. gravity flow	☐ Yes ☐ No
Differential head vs. gravity flow	☐ Yes ☐ No

3. The river flow duration curve is enclosed ☐ Yes ☐ No

4. Specify the discharge capacity of the head pressure conduit ____________

5. Which Flooding Conditions Were Analyzed?

• Gravity flow (Interior Watershed)	☐ Yes ☐ No
• Common storm (River Watershed)	☐ Yes ☐ No
• Historical ponding probability	☐ Yes ☐ No
• Coastal wave overtopping	☐ Yes ☐ No

If no, explain why: ____________

6. Interior drainage has been analyzed based on joint probability of interior and exterior flooding and the capacities of pumping and outlet facilities to provide the established level of flood protection.
☐ Yes ☐ No

If no, explain why: ____________

7. The rate of seepage through the levee system for the 100-year flood is ____________ cfs

INTERIOR DRAINAGE (Cont'd)

1. The length of levee system used to drive this seepage rate is ______________________ ft.

3. Will a pumping plant(s) be used for interior drainage? ☐ Yes ☐ No

If yes, include the number of pumping plants: __________

For each pumping plant, list:

	Plant #1	Plant #2
The number of pumps		
The ponding storage capacity		
The maximum pumping rate		
The maximum pumping head		
The pumping starting elevation		
The pumping stopping elevation		
Is the discharge facility protected?		
Is there a flood warning plan?		
How much time is available between warning and flooding?		

Will the operations be automatic? ☐ Yes ☐ No

If the pumps are electric, are there backup power sources? ☐ Yes ☐ No

(Reference: U.S. Army Corps of Engineers EM-1110-2-3101, 3102, 3103, 3104, and 3105)

Note: Include a copy of supporting documentation of data and analysis. Provide a map showing the flooded area and maximum ponding elevations for all interior watersheds that result in flooding.

OTHER DESIGN CRITERIA

1. The following items have been addressed as stated:

Liquifaction ☐ is ☒ is not a problem.

Hydrocompaction ☐ is ☒ is not a problem

Heave differential movement due to soils of high shrink swell

☒ is ☐ is not a problem.

2. For each of these problems, state the basic facts and corrective action taken

Differential movement due to shrinking and swelling will be mitigated with drilled piers or foundations founded below the zone of seasonal moisture fluctuation.

If the levee/floodwall is new or enlarged, will the structure adversely impact flood levels and/or flow velocities floodside of the structure?

☐ Yes ☐ No

Note: Attach supporting documentation

The planned/installed works are in full compliance with NFIP regulations, Section 44 CFR Ch. 1. 65.10

☐ Yes ☐ No

OPERATIONAL PLAN AND CRITERIA

1. The operation plan incorporates all the provisions for closure devices as required in Section 65.10 (c) (1), of the NFIP regulations

☐ Yes ☐ No

2. The operation plan incorporates all the provisions for interior drainage as required in Section 65.10 (c) (2), of the NFIP regulations

☐ Yes ☐ No

If no to either of the above, please explain.

2. EARTH FILL PLACEMENT

1. The fill is: ☐ Existing ☐ Proposed

2. Has fill been/will be placed in the regulatory floodway? .... ☐ Yes ☐ No
If yes, please attach completed Riverine Hydraulic Analysis Form.

3. Has fill been/will be placed in floodway fringe *(area between the floodway and 100-year floodplain boundaries)*? .... ☐ Yes ☐ No

If yes, then complete A, B, C, and D below.

A. Are fill slopes for granular materials steeper than one vertical on one-and-one-half horizontal? .... ☐ Yes ☐ No

If yes, justify steeper slopes____

____

B. Is adequate erosion protection provided for fill slopes exposed to moving flood waters? *(Slopes exposed to flows with velocities of up to 5 feet per second (fps) during the 100-year flood must, at a minimum, be protected by a cover of grass, vines, weeds, or similar vegetation; slopes exposed to flows with velocities greater than 5 fps during the 100-year flood must, at a minimum, be protected by stone or rock riprap.)* .... ☐ Yes ☐ No

If no, describe erosion protection provided_____________________________________

____

C. Has all fill placed in revised 100-year floodplain been compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test Method or acceptable equivalent method? ☐ Yes ☐ No

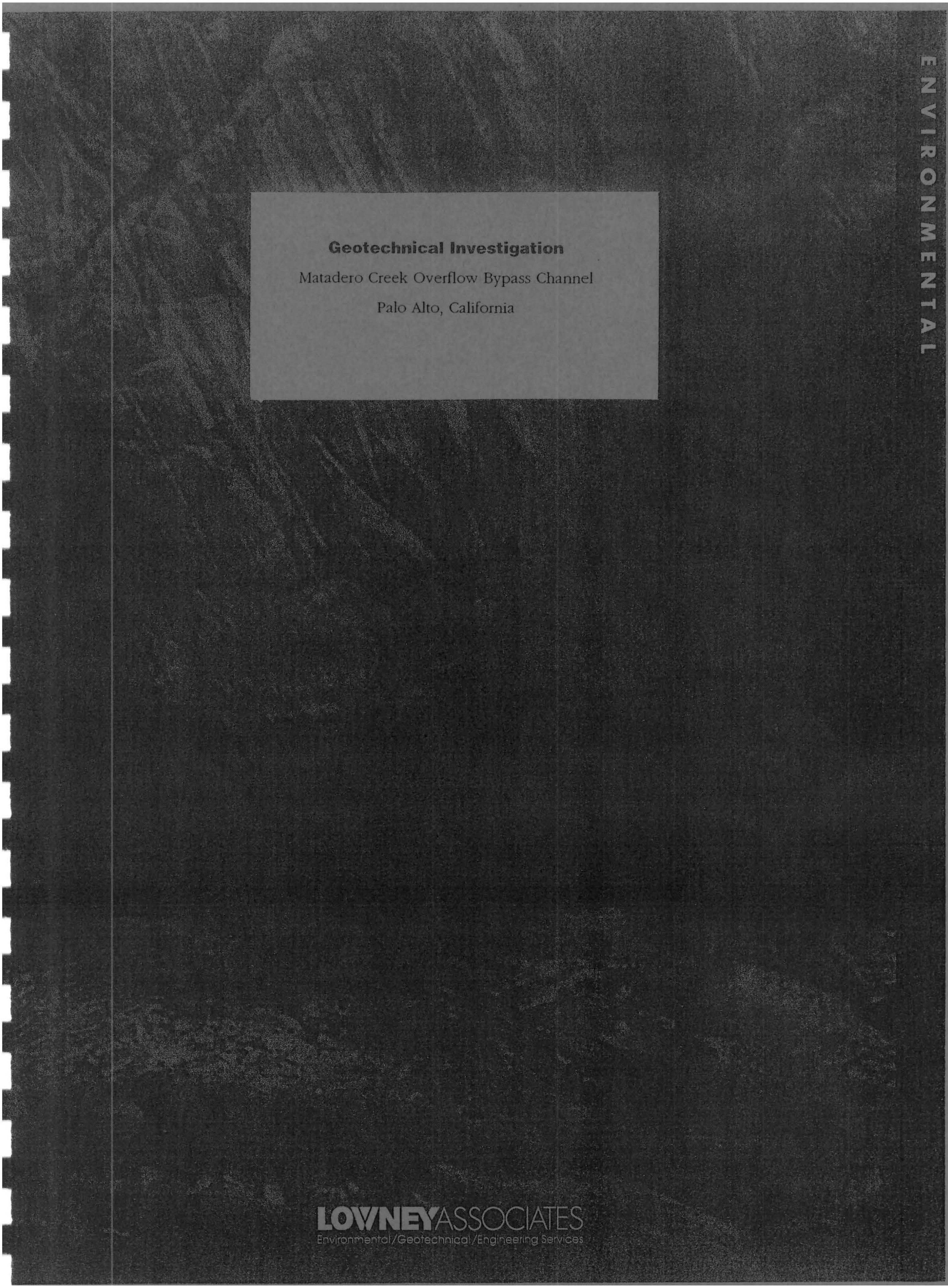
D. Can structures conceivably be constructed on the fill at any time in the future? ☐ Yes ☐ No

If yes, provide certification of fill compaction (item C. above) by the community's NFIP permit official, a registered professional engineer, or an accredited soils engineer.

4. Has fill been/will be placed in a V-zone? ☐ Yes ☐ No

If yes, is the fill protected from erosion by a flood control structure such as a revetment or seawall? ☐ Yes ☐ No

If yes, attach the coastal structures form.



ENVIRONMENTAL

Geotechnical Investigation

Matadero Creek Overflow Bypass Channel

Palo Alto, California

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

APPENDIX C

FEMA FLOODWALL SYSTEM FORMS

FEDERAL EMERGENCY MANAGEMENT AGENCY **LEVEE/FLOODWALL SYSTEM ANALYSES FORM**	O.M.B Burden No 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 3.0. hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0148), Washington, DC 20503.

Community Name: ______________________________

Flooding Source: ______________________________

Project Name/Identifier: ______________________________

REACH TO BE REVISED

Downstream limit: ______________________________

Upstream limit: ______________________________

This Levee/Floodwall analysis is based on:

☐ upgrading of an existing levee/floodwall system
☐ a newly constructed levee/floodwall system
☐ reanalysis of an existing levee/floodwall system

LEVEE/FLOODWALL SYSTEM ELEMENTS

1. Levee elements and locations are:

☐ earthen embankment, dike, berm etc. Station __________ to __________
☐ structural floodwall Station __________ to __________
☐ other (describe) __________________ Station __________ to __________

Structural Type:

☐ monolithic cast-in place reinforced concrete
☐ reinforced concrete masonry block
☐ sheet piling
☐ other (describe) ______________________________

2. Has this levee/floodwall system been certified by a Federal agency to provide protection against the 100-year flood event?

☐ Yes ☐ No

If yes, by which agency? ______________________________

If yes, complete only the interior drainage section on pages 7 and 8 of this form and the operation and maintenance section of Revision Requestor and Community Official Form.

3. Attach certified drawings containing the following information (indicate drawing sheet numbers):

a. Plan of the levee embankment and floodwall structures. Sheet Numbers__________

b. A profile of the levee/floodwall system showing the 100-year water surface elevation, levee and/or wall crest and foundation, and closure locations for the total levee system. Sheet Numbers__________

c. A profile of the 100-year water surface elevation, closure opening outlet and inlet invert elevations, type and size of opening, and kind of closure device. Sheet Numbers__________

d. A layout detail for the embankment protection measures. Sheet Numbers__________

e. Location, layout, and size and shape of the levee embankment features, foundation treatment, floodwall structure, closure structures, and pump stations. Sheet Numbers__________

FREEBOARD

1. The minimum freeboard provided above the 100-year water surface elevation is:

Riverine

3.0 feet or more at the downstream end and throughout ☐ Yes ☐ No
3.5 feet or more at the upstream end ☐ Yes ☐ No
4.0 feet immediately upstream of all structures and constrictions ☐ Yes ☐ No

Coastal

1.0 foot above the height of the one percent wave for the 100-year stillwater surge elevation or maximum wave runup (whichever is greater). ☐ Yes ☐ No

2.0 feet above 100-year stillwater surge elevation ☐ Yes ☐ No

Please note, occasionally exceptions are made to the minimum freeboard requirement. If an exception is requested, attach documentation addressing Part 65.10 (b) (1) (ii) of the National Flood Insurance Program regulations.

If no is answered to any of the above, please explain where and why:____________________

____

2. Tabulate the elevations at critical locations (tabulate values at each levee crest grade change)

Station	Location	100-Year Water Surface Elevation	Levee Crest	Freeboard (ft.)
	Upper end			
	Lower end			

(Extend table on an added sheet as needed and reference)

SEDIMENT TRANSPORT CONSIDERATIONS

1. A. Is there any indication from historical records that sediment transport (including scour and deposition) can affect the 100-year water surface elevations?

☐ Yes ☐ No

B. Based on the conditions (such as geomorphology, vegetative cover and development of the watershed and stream bed, and bank conditions), is there a potential for debris and sediment transport (including scour and deposition) to affect the 100-year water surface elevations and/or the freeboard for the levee/floodwall?

☐ Yes ☐ No

2. If the answer to either 1A or 1B is yes:

A. What is the estimated sediment (bed material) load?

_______cfs (attach gradation curve)

Explain method used to estimate the sediment transport and the depth of scour and/or deposition

____

____

____

____

____

B. Will sediment accumulate anywhere along the levee/floodwall (such as along any bends in the channel)?

☐ Yes ☐ No

If yes, what is the minimum freeboard at these locations?__________________feet.

CLOSURES

Openings through the levee system:

☐ exist ☐ do not exist

If openings exist, list all closures:

Channel Station	Left or Right Bank	Opening Type	Highest Elevation for Opening Invert	Type of Closure Device

(Extend table on an added sheet as neded and reference)

Geotechnical and geologic data:

In addition to the required detail analysis reports, data obtained during field and laboratory investigations and used in the design analysis for the following levee system features should be submitted in a tabulated summary form. (Reference U.S. Army Corps of Engineers EM-1110-2-1906 Form 2086)

EMBANKMENT PROTECTION

1. The maximum levee slope landside is____

2. The maximum levee slope floodside is____

3. The range of 100-year riverine flood velocities along the levee?________________________(min.) to______________________(max.)

4. Embankment material is protected by (describe the kind):______________________________

____

____

____

5. Riprap Design Parameters: (Include references) ☐ Velocity; ☐ Tractive stress

					Stone Riprap			
Reach	Sideslope	Flow depth	Velocity	Curve or Straight	D_{100}	D_{50}	Thickness	Depth of Toedown
Sta_____to_____								
Sta_____to_____								
Sta_____to_____								

(Extend table on an added sheet as needed and reference)

6. Has a bedding/filter analysis and design been included ☐ Yes ☐ No

Describe the analysis used for other kinds of protection used (include copies of the design analysis).

Note: Attach engineering analysis to support construction plans.

EMBANKMENT AND FOUNDATION STABILITY

1. **Describe the basis for selection of critical location for analysis:

☐ Overall height: Sta ______________, height ________________ ft.

☐ Limiting foundation soil strength:

Sta ________________, depth ________________ to ________________

strength ∅ = __________ degrees, c = ______________ psf

☐ slope: SS = ____________ (h) to ______________ (v)

(Repeat as needed on an added sheet for additional locations)

2. **Specify the embankment stability analyses methodology used (e.g. circular arc, sliding block, infinite slope, etc.): ____

____

3. **Summary of stability analysis results:

Case	Loading Conditions	Critical Safety Factor	Criteria (Min.)
I	End of construction	______________	1.3
II	Sudden drawdown	______________	1.0
III	Critical flood stage	______________	1.4
IV	Steady seepage at flood stage	______________	1.4
VI	Earthquake (Case I or III)	______________	1.0

(Reference: U.S. Army Corps of Engineers EM-1110-2-1913 Table 6-1)

4. **Was a seepage analysis for the embankment performed? ☐ Yes ☐ No

Describe methodology used: ____

____

5. **Was a seepage analysis for the foundation performed? ☐ Yes ☐ No

Were uplift pressures at the embankment landside toe checked? ☐ Yes ☐ No

Were seepage exit gradients checked for piping potential? ☐ Yes ☐ No

6. The duration of 100-year flood hydrograph against the embankment is __________ Hrs.

Note: Attach engineering analysis to support construction plans.

**Analysis not performed because vertical floodwalls or U-Frame Section Channèl is proposed to replace the existing sloped channel.

EMBANKMENT AND FOUNDATION STABILITY

1. **Describe analysis submittal based on Code:

☐ UBC (1988) or ☒ Other (specify) 1997 UBC for floodwall and U-Frame channel design.

2. **Stability analysis submitted provides for:
☐ Overturning; ☐ Sliding; If not, explain

3. Loading included in the analyses were:

☒ Lateral earth @ P_a = 45pcf + 8H psf; P_o = 300pcf ~~psf~~
☐ Surcharge--Slope @ , ☒ surface 90pcf + 8H psf
☐ Wind @ P_w = ** psf
☐ Seepage (Uplift); ☐ Earthquake @ P_{eq} = %g
☐ 100-year significant wave height ft.
☐ 100-year significant wave period sec.
Not Applicable

4. **Summary of Stability Analysis Results: Factors of Safety. Itemize for each range in site layout dimension and loading condition limitation for each respective reach.

Loading Condition	Criteria (Min)		Sta	To	Sta	To
	Overturn	Sliding	Overturn	Sliding	Overturn	Sliding
Dead & Wind	1.5	1.5				
Dead & Soil	1.5	1.5				
Dead, Soil, Flood & Impact	1.5	1.5				
Dead, Soil & Seismic	1.3	1.3				

(Ref: FEMA 114 Sept 1986; COE EM 1110-2-2502)

(Note: Extend table on an added sheet as needed and reference)

5. Foundation bearing strength for each soil type: **See geotechnical report for drilled pier parameters for floodwalls.

Bearing Pressure for U-Frame sections	Sustained Load	Short Term Load
Computed design maximum	2,500 psf	1/3 increase psf
Maximum allowable	N/A psf	N/A psf

5. Foundation scour protection ☒ is, ☐ is not provided, (describe)
concrete apron

Note: Attach engineering analysis to support construction plans.

**Should be performed by the Structural Engineer.

SETTLEMENT

1. Anticipated potential settlement has been determined and incorporated into the specified construction elevations to maintain the established freeboard margin. ☒ Yes ☐ No

2. The computed range of settlement is 1/2-inch ft. to 1-inch ft.

3. Settlement of the levee crest is determined to be primarily from:

   ☐ Foundation consolidation
   ☐ Embankment compression
   ☒ Other (describe) Mobilization of skin friction and settlement of mat foundations.

4. Differential settlement of floodwalls

   ☐ has ☐ has not been accommodated in the structural design and construction.

Note: Attach engineering analysis to support construction plans.

INTERIOR DRAINAGE

1. Specify size of each interior watershed

   Draining to pressure conduit ____________
   Draining to ponding area ____________

2. Relationships Established

Ponding elevation vs. storage	☐ Yes ☐ No
Ponding elevation vs. gravity flow	☐ Yes ☐ No
Differential head vs. gravity flow	☐ Yes ☐ No

3. The river flow duration curve is enclosed ☐ Yes ☐ No

4. Specify the discharge capacity of the head pressure conduit ____________

5. Which Flooding Conditions Were Analyzed?

• Gravity flow (Interior Watershed)	☐ Yes ☐ No
• Common storm (River Watershed)	☐ Yes ☐ No
• Historical ponding probability	☐ Yes ☐ No
• Coastal wave overtopping	☐ Yes ☐ No

   If no, explain why: ____________

6. Interior drainage has been analyzed based on joint probability of interior and exterior flooding and the capacities of pumping and outlet facilities to provide the established level of flood protection. ☐ Yes ☐ No

   If no, explain why: ____________

7. The rate of seepage through the levee system for the 100-year flood is ____________ cfs

INTERIOR DRAINAGE (Cont'd)

1. The length of levee system used to drive this seepage rate is ____________________ ft.

3. Will a pumping plant(s) be used for interior drainage? ☐ Yes ☐ No

If yes, include the number of pumping plants: __________
For each pumping plant, list:

	Plant #1	Plant #2
The number of pumps		
The ponding storage capacity		
The maximum pumping rate		
The maximum pumping head		
The pumping starting elevation		
The pumping stopping elevation		
Is the discharge facility protected?		
Is there a flood warning plan?		
How much time is available between warning and flooding?		

Will the operations be automatic? ☐ Yes ☐ No
If the pumps are electric, are there backup power sources? ☐ Yes ☐ No

(Reference: U.S. Army Corps of Engineers EM-1110-2-3101, 3102, 3103, 3104, and 3105)

Note: Include a copy of supporting documentation of data and analysis. Provide a map showing the flooded area and maximum ponding elevations for all interior watersheds that result in flooding.

OTHER DESIGN CRITERIA

1. The following items have been addressed as stated:

Liquifaction ☐ is ☒ is not a problem.
Hydrocompaction ☐ is ☒ is not a problem
Heave differential movement due to soils of high shrink swell
☒ is ☐ is not a problem.

2. For each of these problems, state the basic facts and corrective action taken

Differentialmovement due to shrinking and swelling will be mitigated with drilled piers or foundations founded below the zone of seasonal moisture fluctuation.

If the levee/floodwall is new or enlarged, will the structure adversely impact flood levels and/or flow velocities floodside of the structure?
☐ Yes ☐ No

Note: Attach supporting documentation

The planned/installed works are in full compliance with NFIP regulations, Section 44 CFR Ch. 1.65.10
☐ Yes ☐ No

OPERATIONAL PLAN AND CRITERIA

1. The operation plan incorporates all the provisions for closure devices as required in Section 65.10 (c) (1), of the NFIP regulations
   ☐ Yes ☐ No

2. The operation plan incorporates all the provisions for interior drainage as required in Section 65.10 (c) (2), of the NFIP regulations
   ☐ Yes ☐ No

If no to either of the above, please explain.

____

____

____

____

2. EARTH FILL PLACEMENT

1. The fill is: ☐ Existing ☐ Proposed

2. Has fill been/will be placed in the regulatory floodway? .... ☐ Yes ☐ No
If yes, please attach completed Riverine Hydraulic Analysis Form.

3. Has fill been/will be placed in floodway fringe *(area between the floodway and 100-year floodplain boundaries)?* .... ☐ Yes ☐ No

If yes, then complete A, B, C, and D below

A. Are fill slopes for granular materials steeper than one vertical on one-and-one-half horizontal? .... ☐ Yes ☐ No

If yes, justify steeper slopes______________________________

____

B. Is adequate erosion protection provided for fill slopes exposed to moving flood waters? *Slopes exposed to flows with velocities of up to 5 feet per second (fps) during the 100-year flood must, at a minimum, be protected by a cover of grass, vines, weeds, or similar vegetation; slopes exposed to flows with velocities greater than 5 fps during the 100-year flood must, at a minimum, be protected by stone or rock riprap.)* .... ☐ Yes ☐ No

If no, describe erosion protection provided______________________________

____

C. Has all fill placed in revised 100-year floodplain been compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test Method or acceptable equivalent method? ☐ Yes ☐ No

D Can structures conceivably be constructed on the fill at any time in the future? ☐ Yes ☐ No

If yes, provide certification of fill compaction (item C. above) by the community's NFIP permit official, a registered professional engineer, or an accredited soils engineer.

4. Has fill been/will be placed in a V-zone? ☐ Yes ☐ No

If yes, is the fill protected from erosion by a flood control structure such as a revetment or seawall? ☐ Yes ☐ No

If yes, attach the coastal structures form.

LOWNEYASSOCIATES
Environmental/ Geotechnical/ Engineering Services

Geotechnical Investigation

Matadero Creek Overflow Bypass Channel
Palo Alto, California

Report No. 1453-1G has been prepared for:

Schaaf and Wheeler

Santa Clara, California

September 27, 2001

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FIGURE 1 — VICINITY MAP
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APPENDIX A — FIELD INVESTIGATION
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GEOTECHNICAL INVESTIGATION
MATADERO CREEK OVERFLOW BYPASS
PALO ALTO, CALIFORNIA

1.0 INTRODUCTION

In this report we present the results of our geotechnical investigation for the proposed Matadero Creek Overflow Bypass in Palo Alto, California. The location of the site is shown on the Vicinity Map, Figure 1. The purpose of our investigation was to evaluate the subsurface conditions at the site and to provide geotechnical recommendations for design of the proposed bypass.

For our use we received the following:

- ▼ Palo Alto Flood Basin topographic map received from Schaaf and Wheeler on August 10, 2001.
- ▼ Previous geotechnical report titled, "Geotechnical Investigation on Palo Alto Flood Basin, Project No. 1039," prepared by Terra Search, Inc., dated November 1983.

In addition, Lowney Associates has prepared the following previous correspondence for this project:

- ▼ A letter titled, "Matadero Creek Remediation Project Task 12 – D/S Alternatives Evaluation, Limited Geotechnical and Hazardous Materials Evaluation, Palo Alto, California," dated November 24, 1999.
- ▼ A report titled, "Soil and Ground Water Quality Evaluation, Matadero Creek Remediation Project," dated March 15, 2000.
- ▼ A report titled, "Additional Soil and Groundwater Quality Evaluation, Matadero Creek Remediation Project," dated August 1, 2001.

1.1 Project Background

Based on the evaluation of several construction alternatives for remediating the downstream flood control issues for Matadero Creek, we understand the overflow bypass was recommended. Under this alternative, soil will be excavated for a bypass along the north, east, and south sides of the Palo Alto Municipal Services Center (PAMSC), located at 3201 East Bayshore Road in Palo Alto, California.

In November 1999, Lowney Associates performed a limited Phase I environmental site assessment and geotechnical evaluation for the proposed downstream remediation alternatives. In March 2000 and August 2001, Lowney Associates performed soil and groundwater quality evaluations for the site and the adjacent PAMSC site. The results of the soil and groundwater quality evaluations for the project are presented in separate reports.

1.2 Project Description

As presently planned, the project will consist of various channel improvements to Matadero Creek, west of Highway 101 (upstream of Highway 101). To accommodate potential high flows, an overflow bypass will be constructed downstream of Highway 101. The bypass will divert flow from Matadero Creek to the Palo Alto Flood Basin (PAFB), southeast of PAMSC. The bypass inlet will be near the intersection of Matadero Creek and East Bayshore Drive, will be constructed adjacent to the north, east, and southeast perimeter of the PAMSC, and will discharge to the southeast into the PAFB. The approximate layout of the bypass is shown in Figure 2. The bypass is planned to have a concrete bottom with a gravity retaining wall system of interlocking concrete blocks. Pockets within the wall system can be planted with vegetation. The top of the retaining wall along the PAMSC is planned to be between 7 and 11 feet above sea level and positioned about 10 to 12 feet horizontally from PAMSC. The retaining wall on the riparian corridor side of the project will extend approximately 1 foot above the adjacent grade. The bypass is planned to be 60 feet wide with an inlet invert elevation of 0 feet and an outlet invert elevation of –2 feet. Therefore, excavations on the order of about 9 to 10 feet are required to reach the bottom of the proposed channel overexcavation recommended in subsequent sections of this report along the PAMSC.

1.3 Scope of Services

Our scope of services was presented in detail in our agreement with you dated August 15, 2000. To accomplish this work, we provided the following services:

- Review of previous reports by others and Lowney Associates.
- Exploration of subsurface conditions by drilling 4 borings and retrieving soil samples for observation and laboratory testing.
- Evaluation of the physical and engineering properties of the subsurface soils by visually classifying the samples and performing various laboratory tests on selected samples.
- Engineering analysis to evaluate site seismicity, earthwork, slope stability, settlements, and bypass structure foundations.
- Preparation of this report to summarize our findings and to present our conclusions and recommendations.

Environmental services were not included as part of this geotechnical report. However, Lowney Associates has prepared an environmental report titled, "Additional Soil and Ground Water Quality Evaluation, Matadero Creek Remediation Project, Palo Alto, California, Project 1453-1F," dated September 4, 2001 addressing the environmental aspects of the project.

2.0 SITE CONDITIONS

2.1 Exploration Program

Subsurface exploration was performed on July 5 and 6, 2001 using conventional, truck-mounted rotary wash drilling equipment to investigate, sample, and log subsurface soils. Four exploratory borings were drilled to depths ranging from 20 to 25 feet. Borings were backfilled in accordance with Santa Clara County guidelines. The approximate locations of the borings are shown on the Site Plan, Figure 2. Additionally, we have shown the locations of the borings performed by Terra Search in the levee area adjacent to the PAMSC, and the borings performed by Lowney Associates for our environmental investigation, on Figure 2. Logs of our borings for this study and details regarding our field investigation are included in Appendix A; our laboratory tests are discussed in Appendix B. Logs of the borings by Terra Search are presented in Appendix C.

2.2 Summary of Subsurface Information by others for the PAMSC

Our representative reviewed the geotechnical reports for the PAMSC on file at the City of Palo Alto Public Works Department. Additionally, we were provided a Caltrans Log of Test Boring Sheet for the Matadero Creek Bridge. The log of test boring sheet was illegible and was not usable.

Based on the available geotechnical reports (Robert Cooper and Associates, 1964; Cooper-Clark Associates, 1971; and Kleinfelder, 1989), in general, the subsurface soil conditions at the existing PAMSC consist of fill between Elevation 6 to 2 feet, placed between the early 1960s and early 1970's. Documented and undocumented fills exist at the PAMSC. It is noted that isolated areas of thicker undocumented fills may be present at the proposed bypass alignment. Soft compressible Bay Mud was encountered below the fill on the eastern portion of the PAMSC between Elevation 2 to Elevation –1 foot. Firm to stiff silty clays interbedded with sand layers were encountered beneath the fill on the western portion of the PAMSC and beneath the Bay Mud on the eastern portion of the PAMSC.

Reportedly, ground water was encountered in the borings between Elevation 0 to 2 feet. It is noted that fluctuations in the ground water level will occur due to variations in rainfall, tides, and other factors not in evidence at the time the measurements were made.

2.3 Surface

We also performed a brief surface reconnaissance during our site exploration. The project area is adjacent to the PAMSC. The project area includes the north perimeter of the PAMSC, adjacent to Matadero Creek, and the levees adjacent to the east and southeastern perimeters of the PAMSC. The Palo Alto Flood Basin forms the project boundary to the east of the bypass. East Bayshore Road and the PAMSC form the western limits.

The relatively level site is gently sloping along the levees and low lying areas, with approximately 6 to 7 feet of topographic relief across the project. We understand that the top of the current levee is generally at Elevation 6 feet (USGS MSL Datum). The levees are approximately 15 to 20 feet wide, and are sloped at approximately 2:1 (horizontal to vertical distance) to the Palo Alto Flood Basin. Elevations of the surrounding flood basin ranges from about 0 to –2 feet. The adjacent ground of PAMSC generally slopes down from north to south. The elevation at the north edge is approximately 6 feet; the elevation at the south edge is approximately 3½ feet.

2.4 Subsurface

During our exploratory borings we generally encountered a sequence of fill over soft to medium stiff clay over stiff sandy clays and clayey sands. Fill thickness at the boring locations ranged from 9 to 11 feet thick. The medium stiff clay (possibly desiccated Bay Mud) ranged in thickness from 3 to 4 feet.

Our boring and laboratory testing data indicates:

- Fill across the site can generally be classified as stiff to very stiff, moderately to highly plastic clays, with estimated undrained shear strengths ranging from 1500 to 4000 pounds per square foot. Atterberg tests performed on a sample from the fill indicate a plasticity index of 31 with a liquid limit of 44 percent, indicating high expansion potential.
- The medium stiff clay layer appeared to be Bay Mud, however the soil did not generally exhibit the very soft and highly compressible properties that typically characterize bay mud. The layer generally consists of medium stiff, highly plastic, blue-gray silty clay with an estimated undrained shear strength of about 1000 pounds per square foot. Atterberg tests performed on a sample of the clay indicate a plasticity index of 49 with a liquid limit of 66 percent, indicating high expansion potential.
- Soils encountered below the medium stiff clay layer can be classified as silty clays, sandy clays and medium dense clayey sands with undrained shear strengths ranging from 1500 to 3000 pounds per square foot. These clays are judged to have moderate expansion potential.

2.5 Ground Water

Free ground water was encountered during drilling in Exploratory Borings EB-4 and EB-6 at depths ranging from 14 to 15 feet, which corresponds to approximately Elevation -8 to –9 feet, respectively. In addition, the ground water level was recorded in Boring EB-6 at a depth of 10 feet, 16 hours after drilling, which corresponds to approximately Elevation –4 feet,. All other borings were backfilled immediately after drilling. Groundwater measurements were not made in Borings EB-3 and EB-5 due to the rotary wash method of drilling. Reportedly, ground water was encountered in the borings performed by others for the PAMSC between Elevation 0 to 2 feet. Groundwater was encountered between 8 to 16 feet below the existing ground surface for the borings drilled for our environmental evaluation. We estimate that ground water levels may regularly reach Elevations of about 2 feet during periods of wet weather. Fluctuations in the level of the ground water may occur due to variations in rainfall, tidal action, underground drainage patterns, and other factors not evident at the time measurements were made.

3.0 GEOLOGIC HAZARDS

A brief qualitative evaluation of geologic hazards was made during this investigation. Our comments concerning these hazards are presented below.

3.1 Fault Rupture Hazard

A Regional Fault Map illustrating known active faults relative to the site is presented in Figure 3. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone (known formerly as a Special Studies Zone). As shown on Figure 3, no known surface expression of active faults is believed to cross the site. Fault rupture through the site, therefore, is not anticipated.

3.2 Ground Shaking

Strong ground shaking can be expected at the site during moderate to severe earthquakes in the general region. This is common to virtually all developments in the San Francisco Bay Area. The "Seismicity" section that follows summarizes potential levels of ground shaking at the site.

3.3 Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands.

For this project site, the soils encountered in the borings consist primarily of clays, which are not considered susceptible to liquefaction. A medium dense clayey sand was encountered at 23 feet in Boring EB-5; however, this sand layer was classified as clayey and contained 37 percent fine grained material (i.e. clays and silts).

Because of the significant cohesive (clay) component of this lens, we do not consider this layer to be liquefiable. Also, because the deeper sand layers in this geologic environment are generally thin and located below thick clay deposits, the potential for ground rupture and damage to the proposed improvements due to liquefaction is considered low.

3.4 Differential Compaction

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform compaction of soil strata, resulting in movement of the near-surface soils. Because the subsurface soils encountered at the site are generally uniform and do not appear to change in thickness or consistency abruptly over short distances, we judge the probability of significant differential compaction at the site to be low.

3.5 Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. In soils this movement is generally due to failure along a weak plane, and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil displace laterally towards the open face. Cracking and lateral movement may gradually propagate away from the face as blocks continue to break free. Generally, failure in this mode is analytically unpredictable, since it is difficult to determine where the first tension crack will occur. Because the subsurface soils encountered were generally cohesive soils, with low liquefaction potential, and excavations will be retained with concrete-lined channel walls; we judge the probability of lateral spreading to be low.

4.0 SEISMICITY

4.1 Regional Active Faults

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined, active fault zones of the San Andreas Fault system, which regionally trend in a northwesterly direction. The San Andreas Fault, which generated the great San Francisco earthquake of 1906, passes about 7½ miles southwest of the site. Two other major active faults in the area are the Hayward Fault, located about 12 miles east of the site, and the Calaveras Fault, located about 16 miles east. The Monte-Vista Shannon Fault, locally considered a "B" type seismic source, is located about 5½ miles southeast of the site.

4.2 Maximum Estimated Ground Shaking

We performed a Deterministic Seismic Hazard Analysis (DSHA) for this site. This analysis utilizes the maximum Moment Magnitude (M_w) for the controlling faults, published attenuation curves, the shortest distance to the fault, and site-specific response characteristics. Based on the attenuation methods of Campbell and Bozorgnia (1994), the mean peak ground acceleration (PGA) expected for this site is 0.46g from a magnitude $7.9M_w$ event on the San Andreas Fault, located 7½ miles to the west. If a 6.7 M_w event were to occur on the Hayward Fault, located 12 miles to the east, the expected PGA is 0.21g.

4.4 Future Earthquake Probabilities

Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when or where an earthquake will occur. The U.S. Geological Survey's Working Group on California Earthquake Probabilities (1999), referred to as WG99, determined that there is a 70 percent chance (±10%) of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2000 and 2030. This result is the most important outcome of WG99's work, because any major earthquake can cause damage throughout the region.

This was dramatically demonstrated when the 1989 Loma Prieta earthquake caused severe damage in Oakland and San Francisco, more than 50 miles from the fault rupture. Although earthquakes can inflict damage at a considerable distance, shaking will be very intense near the fault rupture. Therefore, earthquake located in urbanized areas of the region have the potential to cause much more damage than the 1989 Loma Prieta earthquake.

4.5 UBC Site Coefficient

Based on our borings and knowledge of the area geology, the site is underlain by soft to medium stiff soils to depths of 15 to 20 feet and medium stiff to very stiff and medium dense to very dense soils from depths of 20 feet to over 100 feet. These conditions fall in the range of a UBC "Stiff Soil Profile (S_D)"; we therefore recommend considering the site conditions to conform with a UBC "Soil Profile (S_D)".

The California Division of Mines and Geology (CDMG) has recently issued maps locating "Active Fault Near-Source Zones" to be used with the 1997 Uniform Building Code ("Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada," CDMG/ICBO February 1998). Faults are classified as either "A," "B," or "C" as shown below. Only faults classified as "A" or "B" are mapped since faults classified as "C" do not increase the near-source factor.

Table 1. Seismic Source Definitions

Seismic Source Type	Seismic Source Description	Seismic Source Definition*	
		Maximum Moment Magnitude, M	Slip Rate, SR (mm/yr)
A	Faults that are capable of producing large magnitude events and that have a high rate of seismic activity.	M ≥ 7.0	SR ≥ 5
B	All faults other than Types A and C.	M ≥ 7.0 M < 7.0 M ≥ 6.5	SR < 5 SR > 2 SR < 2
C	Faults that are not capable of producing large magnitude earthquakes and that have a relatively low rate of seismic activity.	M < 6.5	SR ≤ 2

*Note: Both maximum moment magnitude and slip rate conditions must be satisfied concurrently when determining seismic source type.

The following table lists Type A and Type B faults within 25 kilometers of the site:

Table 2. Approximate Distance to Seismic Sources

Fault	Seismic Source Type	Distance (kilometers)
** Monte Vista - Shannon	B	9
*San Andreas (1906)	A	12
Hayward (Southeast Extension)	B	19
Hayward (Total Length)	A	19
Calaveras	B	25

*Nearest Type A fault
**Nearest Type B fault

Based on this information, the site may be characterized for design based on Chapter 16 of the 1997 UBC using the information in Table 3 below.

Table 3. 1997 UBC Site Categorization and Site Coefficients

Categorization/Coefficient	Design Value
Soil Profile Type (Table 16-J)	S_D
Seismic Zone (Figure 16-2)	4
Seismic Zone Factor (Table 16-I)	0.4
Seismic Source Name	San Andreas
Seismic Source Type (Table 16-U)	A
Distance to Seismic Source (kilometers)	12
*Near Source Factor N_a (Table 16-S)	1.00
Near Source Factor N_v (Table 16-T)	1.12
Seismic Coefficient C_a (Table 16-Q)	0.44
Seismic Coefficient C_v (Table 16-R)	0.72

*Note: For Seismic Zone 4, the near-source factor Na used to determine Ca need not exceed 1.1 for structures complying with all the conditions within UBC Section 1629.4.2.

5.0 CONCLUSIONS AND DEVELOPMENT CONSIDERATIONS

5.1 Conclusions

From a geotechnical engineering viewpoint the proposed overflow bypass may be constructed as planned, provided design and construction is performed in accordance with the recommendations presented in this report.

The primary geotechnical concerns at the site are:

- ▼ Influence of groundwater on the design and construction of the improvements.
- ▼ Subgrade stability and support of the bypass on the moderately compressible clay layer below the channel invert.
- ▼ Support of temporary excavations.
- ▼ Potential for petroleum hydrocarbon impacted soil and groundwater near the PAMSC storage tank area.
- ▼ The presence of moderately to highly expansive soils.

5.1.1 Ground Water

Seasonal fluctuations in the ground water levels should be anticipated. The contractor should anticipate dewatering and/or other means of ground water control during construction of the proposed improvements. Geotechnical recommendations for dewatering are presented in subsequent sections of this report.

5.1.2 Subgrade Stabilization

Our borings encountered a layer of moderately compressible clay, possibly desiccated bay mud, below the bypass invert. The geotechnical concern with this layer is subgrade stability during construction and support of the bypass. Furthermore, construction in the bypass will likely require placement of subgrade stabilization materials at the base of the bypass, as the native subgrade soils are anticipated to be unable to support construction traffic. Geotechnical recommendations for preparation of the subgrade at the bypass base are presented in the sections that follow.

5.1.3 Temporary Excavations

Temporary excavations will be necessary for construction of the bypass. To provide safe working conditions and reduce the potential for damage of adjacent utilities, structures, pavements and other improvements, we recommend that an excavation support plan be developed by the contractor prior to construction. Geotechnical considerations for temporary excavations are presented in the "Temporary Slopes and Shoring" section of this report.

5.1.4 Impacted Soil and Ground Water

As discussed in our soil and groundwater quality evaluation report dated September 4, 2001, soil and groundwater impacted by petroleum hydrocarbons may be encountered (in the vicinity of the proposed channel alignment), most likely within approximately 75 feet of the PAMSC storage tank area. For this reason, we recommend the use of interlocking sheet piles as a ground water cutoff and shoring system along the PAMSC property line in the area of potentially impacted soil and ground water, and stockpiling of potentially impacted soil excavated from within 75 feet of the PAMSC storage tank area. The area of concern, where interlocking sheetpiles and stockpiling of impacted soil would be required, is shown on Figure 2. In addition, specific recommendations to address this issue are also provided in our September 4, 2001 report.

5.1.5 Highly Expansive Soils

Another geotechnical concern is the moderate to high expansion potential of the native soils. To reduce the potential for damage to the planned structures, we recommend slabs-on-grade have sufficient reinforcement and be supported on a layer of non-expansive fill and the foundations be founded below the depth of seasonal moisture fluctuation. Detailed recommendations are presented in the following sections of this report.

5.2 Plans, Specifications, and Construction Review

Because subsurface conditions may vary from those predicted by relatively small diameter, widely spaced borings, and to check that our recommendations have been properly implemented, we recommend we be retained to 1) review final construction plans and specifications and 2) observe the earthwork and foundation construction. Also, the construction process can affect geotechnical conditions. All earthwork and foundation preparation should be performed under the direct observation of the geotechnical engineer of record.

6.0 EARTHWORK

Earthwork for this project is likely to consist of vegetation removal, installation of temporary shoring, excavation in the bypass, subgrade preparation, backfilling of bypass improvements, and restoration of the surface improvements.

6.1 Clearing and Soil Disposal

The site should be cleared of all surface improvements to be removed and subsurface deleterious materials, including buried utility lines, fills, pavements, debris, designated trees, shrubs, weeds and associated roots. All deleterious materials should be removed from the site and appropriately disposed. Excavations extending below the planned finished site grades should be cleaned and backfilled with suitable material compacted as recommended in the "Compaction" section of this report. We recommend that the backfilling be carried out under the observation of the geotechnical engineer of record.

Our soil and groundwater quality evaluation indicated the presence of hydrocarbon impacted soil and groundwater adjacent to the fuel tanks on the PAMSC property. During bypass construction, petroleum hydrocarbons may be encountered. Soil excavated from this area, within approximately 75 feet from the fuel tanks (Figure 2), should be stockpiled on visqueen, and covered by visqueen. Samples should then be collected to appropriately characterize the soil quality. If impacted, the soil should be disposed off-site to an approved facility. Alternatively, if petroleum hydrocarbon concentrations are low, it may be possible to obtain approval from the overseeing regulatory agency to reuse the soil on-site. Earthwork activities in this area will need to be performed by appropriately trained personnel. Specific recommendations are also provided in our September 4, 2001 report.

6.2 Dewatering

As discussed previously in the "Ground Water" section, ground water is anticipated near and possibly above the invert of the proposed bypass. If excavations for the bypass extend to depths of about 9 to 12 feet as proposed, dewatering will likely be needed to control ground water and surface water so that backfilling can be done in a dry environment. It is anticipated, based on soil borings made in the area, that the base of the excavation will penetrate mostly medium stiff clays. Considering these conditions, it is conceivable that a temporary sheet pile wall or other shoring system could be used to help cutoff groundwater infiltration into the excavation and that temporary dewatering could be accomplished in the bypass area using a system of well points and/or dewatering wells. The final selection of the dewatering system is the responsibility of the contractor, however, a dewatering system should meet the following general guidelines.

- Surficial sumps will likely not be effective, and therefore, a system of connected well points/dewatering wells should be used.
- Ground water should be maintained continuously during construction below the bottom of the subexcavation depth (approximately Elevation –4½ feet). Discontinuous operation of the dewatering system can cause significant disturbance to the excavation subgrade, and could require substantial mitigative efforts, including re-excavation and stabilization of the bypass subgrade.
- To limit potential effects to adjacent improvements, ground water drawdown should be limited. In general, ground water should not be lowered below Elevation –12 feet. Well points should be constructed and screened to meet this criteria.
- Temporary settlement points should be monitored on the PAMSC site, particularly near structures, to determine if settlement may be occurring due to ground water drawdown. Preconstruction pictures and video of the adjacent PAMSC site is advisable, as well as monitoring for distress during construction.

- Ground water may potentially be impacted, particularly near the PAMSC fuel station. Ground water extracted from the dewatering system will most likely require testing prior to disposal. The contractor should not assume that ground water from dewatering can be pumped into the storm or sanitary system without testing. Specific recommendations are included in our September 4, 2001 report.

It is recommended that the contractor submit his proposed dewatering system scheme for review by the engineer prior to installation.

6.3 Subgrade Preparation

Earthwork contractors should be made aware of the moisture sensitivity of clayey soils and potential compaction difficulties. If construction is undertaken during wet weather conditions, the surficial soils may become saturated, soft and unworkable. Based on the results of our borings and laboratory testing, the subgrade materials anticipated to be exposed exhibit relatively high moisture contents, in some cases 10 percent or more above the laboratory optimum moisture content. Drying of these exposed subgrade materials may be required to minimize pumping conditions. As an alternative, stabilization of these materials may be needed. Subgrade stabilization techniques might include the use of engineering fabrics and/or crushed rock. Therefore, we recommend that consideration be given to construction during the summer months to facilitate these construction activities.

Heavy construction machinery should not be allowed to operate on the base of excavations made to depths of Elevation 2 feet or deeper. This precaution is recommended because of the potentially unstable and pumping subgrade conditions, which can be anticipated in soils of moderate to high natural moisture contents. If such equipment is needed in these areas, supplemental stabilization techniques for the base of the excavation should be anticipated.

After the site has been properly cleared, stripped, and necessary excavations have been made, exposed surface soils in those areas to receive fill, slabs-on-grade, or pavements should be prepared as follows:

Excavation for the bypass is expected to extend into saturated, moderate strength clay deposits that are near or below ground water. The wet clays at the base of the bypass excavation are expected to be unable to support construction equipment /traffic. Disturbance of these materials during construction could lead to substantially large deflections and pumping. To stabilize the bottom of excavations, and to provide a working surface during construction, we recommend the overexcavation of subgrade to a depth of 3 feet and replacement with a layer of geotextile fabric (Mirafi 700X or equivalent) and a 3-foot section of bridging rock to bridge the soft, wet subgrade. Bridging rock for placement on top of geotextile fabric shall consist of clean, hard, durable rock with the following grading requirements:

Sieve Size	Percentage Passing Sieve
6"	100
2"	0 – 50
3/4"	0 – 10

To minimize disturbance, we recommend that overexcavation for stabilization be made by equipment within the channel bed, supported above the overexcavation (e.g. using backhoe or excavator), starting at the southeast end of the bypass and continuing to the northwest end. A temporary working platform may need to be created in unstable or low lying areas to support the excavation equipment as the excavation progresses. The fabric and stabilization rock should be placed, following completion of the excavations, starting at the northwest end and continuing to the southeast end. To limit surcharge on any shoring system, deflections and potential distress to the PAMSC site, we recommend that excavations and fabric and rock placement take place within the channel alignment and not from the adjacent site.

As an alternative to stabilization of the subgrade by filter fabric and rock placement, we feel that chemical treatment may be a more economical and time efficient alternative for subgrade stabilization; however, we understand that this type of stabilization may not be desirable in close proximity to environmentally sensitive areas.

In all other areas of the project to receive fill, slabs-on-grade, or pavements, exposed surface soils should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the recommendations for fill presented in the "Compaction" section. The finished compacted subgrade should be firm and non-yielding under the weight of compaction equipment.

6.4 Material for Fill

Existing fill soils, with the exception of Bay Mud, below the stripped layer having an organic content of less than 3 percent by weight may be suitable for use as fill at the site. Further, Bay Mud may not be suitable as a landscaping soil, due to its' marine origin, and high sulfate concentration. In general, fill material should not contain rocks or lumps larger than 6 inches in greatest dimension, with no more than 15 percent larger than 2½ inches, with the exception of the bridging rock specified for stabilization in Section 6.3; imported structural fill material should be inorganic and should have a Plasticity Index of 15 or less, and a Liquid Limit of 40 or less. Imported fill should have sufficient binder to prevent caving of utility trenches. A member of our staff should approve proposed import material at least four days prior to delivery to the site. Compliance testing for aggregate base may take up to 10 days to complete.

Consideration should also be given to the environmental characteristics as well as the corrosion potential of import soils. Laboratory testing, including pH, soluble sulfates, chlorides, and resistivity will provide information regarding corrosion potential. Import soils should not be more corrosive than the native materials.

6.5 Compaction

All fill, as well as scarified surface soils in those areas to receive fill or slabs-on-grade, should be compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557, latest edition, at a moisture content near the laboratory optimum, except for the existing expansive clays. The existing expansive clays should be compacted at a moisture content at least 3 percent over optimum. Fill should be placed in lifts no greater than 8 inches in uncompacted thickness. Each successive lift should be firm and non-yielding under the weight of construction equipment.

In pavement areas, the upper 6 inches of subgrade and full depth of aggregate base should be compacted to at least 95 percent relative compaction (ASTM D1557, latest edition). Aggregate base and all import soils should be compacted at a moisture content near the laboratory optimum.

6.6 Wet Weather Conditions

Earthwork contractors should be made aware of the moisture sensitivity of clayey soils and potential compaction difficulties. If construction is undertaken during wet weather conditions, the surficial soils may be saturated, soft and unworkable and drying may be difficult. Subgrade stabilization techniques might include the use of engineering fabrics and/or crushed rock or chemical treatment. Therefore, we recommend that consideration be given to construction during summer months.

6.7 Trench Backfill

Bedding and pipe embedment materials to be used around underground utility pipes should be well graded sand or gravel conforming to the pipe manufacturer's recommendations and should be placed and compacted in accordance with project specifications, ~~local~~ requirements or governing jurisdiction. General fill to be used above pipe embedment materials should be placed and compacted in accordance with local requirements or the recommendations contained in this section, whichever is more stringent.

On-site soils may be used as general fill above pipe embedment materials provided they meet the requirements of the "Material for Fill" section of this report. General fill should be placed in lifts not exceeding 8 inches in uncompacted thickness and should be compacted to at least 90 percent relative compaction (ASTM D1557, latest edition) by mechanical means only. Water jetting of trench backfill should not be allowed. The upper 6 inches of general fill in all pavement areas subject to wheel loads should be compacted to at least 95 percent relative compaction.

6.8 Temporary Slopes and Trench Excavations

The contractor should be responsible for all temporary slopes and trenches excavated at the site and design of any required temporary shoring. Shoring, bracing or temporary slopes should be performed by the contractor in accordance with the strictest governing safety standards. Vertical excavations may be temporarily shored using sheet piling, soldier piles with lagging, braced shoring or other shoring schemes, depending on the judgment of the shoring designer and contractor. As a minimum, we recommend that the lateral soil pressures presented in the "Overflow Bypass" section of this report be used in the design of temporary shoring. Shoring systems should also be capable of demonstrating basal stability due to the presence of weak soils in the proposed excavations.

The excavation shoring should be designed for additional surcharge loads due to normal street or vehicle parking loads, loading from adjacent structures, construction equipment or other surcharge loads. To prevent excessive surcharging of the walls from heavy construction vehicles such as concrete trucks, we recommend that such vehicles be kept at least 10 feet from the top of the excavations; if this is not possible, the shoring must be designed to resist the additional lateral loads. In addition, all shoring schemes should be designed with sufficient rigidity to prevent detrimental displacements at the top of the shoring, particularly where excavations are completed adjacent to existing utilities, pavements or other improvements.

Alternatively, temporary excavations may be made by temporary cuts. Safety standards set by OSHA limit the height of unshored vertical excavations to 5 feet if construction personnel will be working in the open excavations. Guidelines published by OSHA classify soils in detail as Type A, B, or C. In general, Type A soils are stronger, Type B soils are intermediate, and Type C soils are weaker. Based on the soil type, depth, duration the excavation is open, and the sequence of soils exposed in the excavation, OSHA recommends maximum allowable slopes. Based on this information and the soils encountered at the site during our field investigations, the site soils generally correspond to OSHA Type B and C. On this basis, it is recommended that temporary slopes in soils be cut at a slope no steeper than 1½:1.

Based on our experience with similar site conditions; it is our opinion due to the potential high groundwater conditions and presence of weak soils at the proposed channel invert that 1½:1 (horizontal:vertical)) temporary slopes may not be stable. On a preliminary basis, we would recommend a maximum temporary slope inclination of 2:1 (horizontal:vertical) and a maximum unsupported vertical height of 3 feet for the medium stiff clays at the site. Slope excavations should be reviewed during construction to confirm the OSHA soil type, classification, and the general conditions. Some sloughing and erosion can be expected during construction, particularly where vertical cuts are present or active seepage is occurring. Additional excavations, temporary shoring, slope flattening or other remedial steps may be required in these areas, particularly near PAMSC improvements where settlement and/or deflections would be detrimental.

Due to potential environmental impacts to the ground water in the area of the PAMSC fuel station, and to limit the drawdown of impacted ground water, we recommend that the shoring along the northwest side of the PAMSC consist of interlocking sheet piles to act as a ground water cutoff within 75 feet of the PAMSC fueling station as shown on Figure 2. These interlocking sheet piles should be left in place following construction unless the contractor can demonstrate a cost effective method for removal without disturbance to the channel or adjacent PAMSC site.

6.9 Surface Drainage

Positive surface water drainage gradients should be provided adjacent to the structures to direct surface water away from bypass walls and foundations towards suitable discharge facilities. Ponding of surface water should not be allowed on or adjacent to structures, slabs-on-grade, or pavements.

6.10 Construction Observation

All grading and earthwork should be performed under the observation of the geotechnical engineer of record to check that the site is properly prepared, that selected fill materials are satisfactory, and that placement and compaction of fills is performed in accordance with our recommendations and the project specifications. Sufficient notification to us prior to earthwork is essential. The project plans and specifications should incorporate all recommendations contained in this report.

7.0 FOUNDATIONS

7.1 Overflow Bypass

The proposed overflow bypass base may be constructed as a conventionally reinforced mat foundation. A bottom slab or mat foundation, which extends for the full width across the bypass, is being considered for support. We recommend that drainage be considered behind the proposed block wall to provide drainage and mitigate uplift of the bypass structure due to hydrostatic pressures.

The proposed bypass channel base may be constructed as a conventionally reinforced mat foundation. All mats may be designed for an average areal bearing pressure of 1000 pounds per square foot (psf) for dead plus live loads, with maximum localized allowable bearing pressures of 2000 psf at wall loads. Allowable bearing pressures may be increased by one-third for all loads including wind or seismic. These allowable bearing pressures are net values; the weight of the mat can be neglected for design purposes. The mat foundations should be founded on the stabilized subgrade as discussed in Section 7.5 of this report.

All mats should be reinforced with top and bottom steel, as appropriate, to provide structural continuity and to help span local irregularities. These recommendations may be revised depending on the particular design method selected by the structural engineer. It is essential that we observe the mat foundation subgrade prior to placement of reinforcing steel.

Due to the weight of soil being removed to construct the channel, we estimate that the net pressure increase for the bypass structure will be negligible. However, some post-construction settlement could occur as a result of recompression. Based on our knowledge and experience in working with similar conditions, we estimate that total maximum settlements on the order of 1-inch or less are likely along the channel. We recommend that the mat be designed assuming about ½-inch of differential settlement could occur over a lateral distance of 30 feet. If foundations designed in accordance with the above recommendations are not capable of resisting ½-inch of differential movement in 30 feet, additional reinforcement may be required. We anticipate that the proposed concrete block wall will bear on the structural mat. However, if the concrete block walls bear outside the mat, settlement of the block wall could be greater than the above estimates.

7.2 Lateral Loads

Lateral loads may be resisted by friction between the mat and/or footings and the supporting subgrade. A maximum allowable frictional resistance of 0.30 may be used for design. In addition, lateral resistance may be provided by passive pressure acting against foundations poured neat against competent soil. We recommend that an allowable passive pressure based on an equivalent fluid pressure of 250 pounds per cubic foot be used in design.

8.0 RETAINING WALLS

8.1 Lateral Earth Pressures

Proposed retaining walls of the bypass should be designed to resist lateral earth pressures from adjoining natural materials, backfill, and surcharge loads. Provided that adequate drainage is provided as recommended below, we recommend that walls restrained from movement at the top be designed to resist an equivalent fluid pressure of 55 pounds per cubic foot (pcf) plus a uniform pressure of 8H pounds per square foot, where H is the distance in feet between the top of the footing and the top of the retained soil. Restrained walls should also be designed to resist an additional uniform pressure equivalent to one-half of any uniform surcharge loads applied at the surface. Any unrestrained retaining walls with adequate drainage should be designed to resist an equivalent fluid pressure of 55 pcf plus one-third of any surcharge loads.

The above lateral earth pressures assume level backfill conditions and sufficient drainage behind the walls to prevent build-up of hydrostatic pressure from surface water infiltration and/or a rise in the ground water level. If adequate drainage is not provided, we recommend an equivalent fluid pressure of 40 pcf be added to the values recommended above for both restrained and unrestrained walls.

8.2 Drainage

We understand that interlocking concrete block walls are currently planned. If the block wall system does not provide for adequate drainage (i.e. relief of hydrostatic pressure), a drainage system with periodic outlets will be required. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 2 feet out from the wall or the structural backfill, depending on manufacturers recommendation, and to within 2 feet of outside finished grade. Alternatively, ½-inch to ¾-inch crushed rock may be used in place of the Class 2 Permeable Material provided the crushed rock and pipe are enclosed in filter fabric, such as TCMirafi 140N or equivalent. The upper 2 feet of wall backfill should consist of relatively impervious compacted on-site clayey soil. The subdrain outlet should be connected to a free-draining outlet. Drainage outlets may need to be placed high enough in the wall to avoid being buried or blocked by sediment. This may require designing the portion of the wall below this elevation for hydrostatic pressures.

8.3 Backfill

Backfill placed behind the walls should be compacted to at least 90 percent relative compaction using light compaction equipment. If heavy compaction equipment is used, the walls should be temporarily braced.

Please note that sufficient room for the backfill and placement of wall reinforcement will be required. We understand that walls on the order of 7 to 11 feet in height are planned. As a rule of thumb, reinforcement lengths on the order of the height of the wall could be required.

9.0 LIMITATIONS

This report has been prepared for the sole use of Schaaf and Wheeler, specifically for design of the Matadero Creek Downstream Overflow Bypass in Palo Alto, California. The opinions presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in the San Francisco Bay Area at the time this report was written. No other warranty, expressed or implied, is made or should be inferred.

The opinions, conclusions and recommendations contained in this report are based upon the information obtained from our investigation, which includes data from widely separated discreet locations, visual observations from our site reconnaissance, and review of other geotechnical data provided to us, along with local experience and engineering judgment. The recommendations presented in this report are based on the assumption that soil and geologic conditions at or between borings do not deviate substantially from those encountered or extrapolated from the information collected during our investigation. We are not responsible for the data presented by others.

The recommendations provided in this report are based on the assumption that we will provide geotechnical engineering services review of the project plans and observation and testing services during construction. This will allow us to form an opinion regarding the geotechnical aspects of the project design and construction with our recommendations. If we are not retained for these services, Lowney Associates cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of Lowney Associates' report by others. Furthermore, Lowney Associates will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services and/or at the time another consultant is retained for follow up service to this report.

The opinions presented in this report are valid as of the present date for the property evaluated. Changes in the condition of the property will likely occur with the passage of time due to natural processes and/or the works of man. In addition, changes in applicable standards of practice can occur as a result of legislation and/or the broadening of knowledge. Furthermore, geotechnical issues may arise that were not apparent at the time of our investigation. Accordingly, the changes opinions presented in this report may be invalidated, wholly or partially, by changes outside of our control. Therefore, this report is subject to review and should not be relied upon after a period of three years, nor should it be used , or is it applicable , for any other properties

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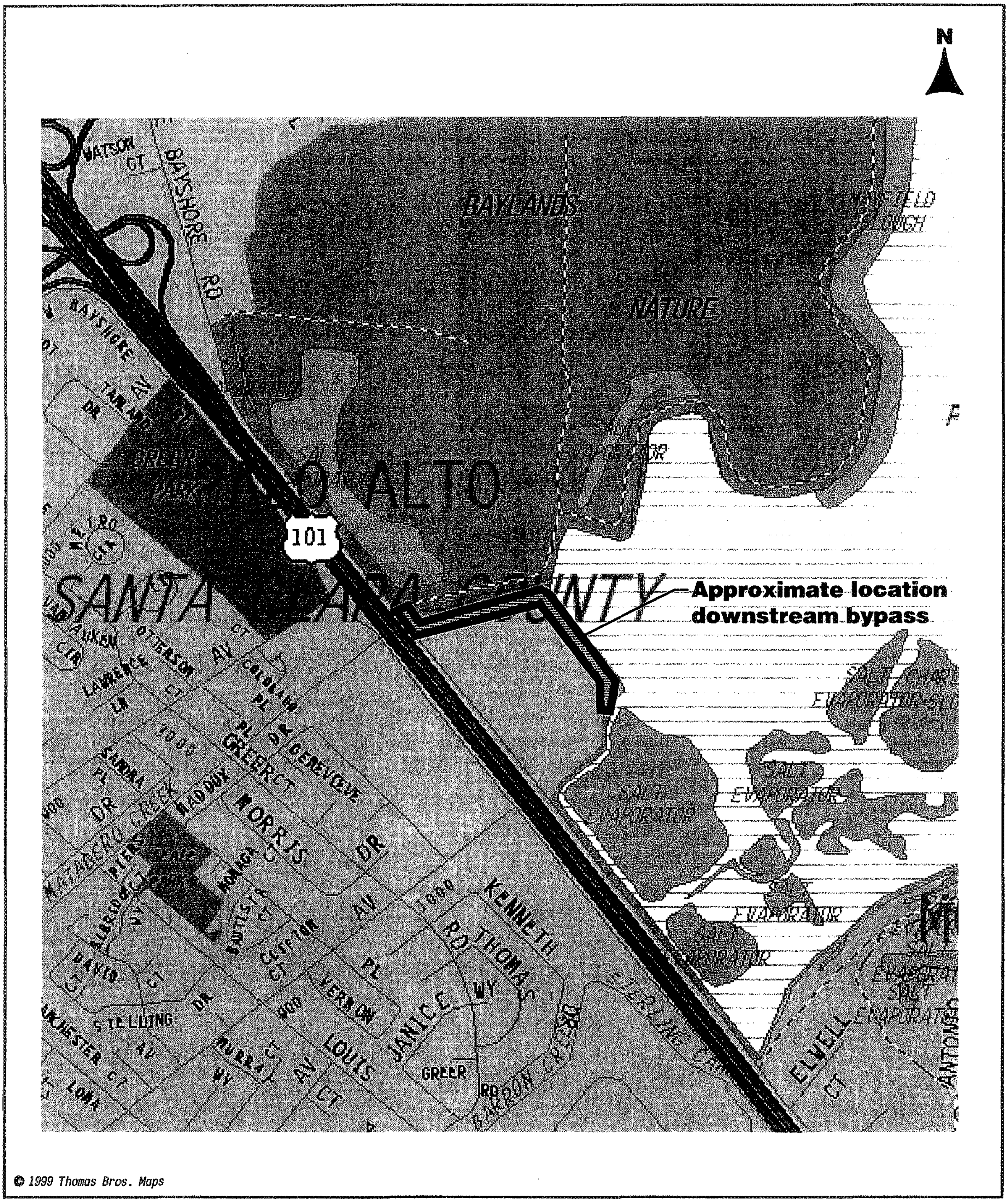
Figures



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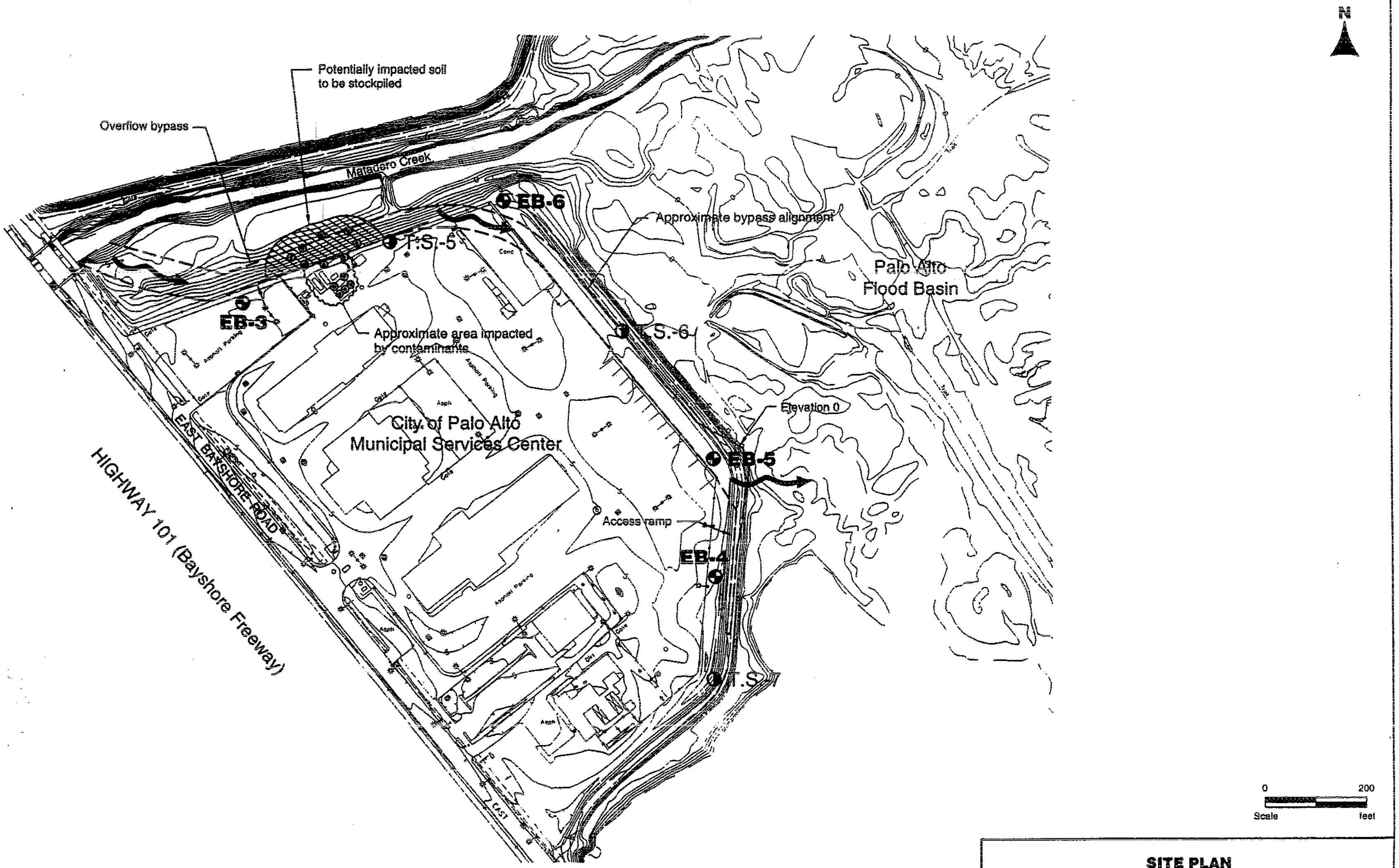
8/01*EB

VICINITY MAP

MATADERO CREEK PROPOSED DOWNSTREAM BYPASS
Palo Alto, California

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 1
1453-1G


N
Potentially impacted soil to be stockpiled
Overflow bypass
Matadero Creek
EB-6
Approximate bypass alignment
T.S.-5
Palo Alto Flood Basin
EB-3
Approximate area impacted by contaminants
T.S.-6
Elevation 0
City of Palo Alto Municipal Services Center
EB-5
HIGHWAY 101 (Bayshore Freeway)
EAST BAYSHORE ROAD
Access ramp
EB-4
T.S.-7
0
200
Scale
feet

LEGEND

- ⊕ - Approximate location of exploratory boring
- ◑ - Approximate location of previous exploratory boring by Terra Search (1983)
- ◉ - Approximate location of Lowney Associates environmental borings

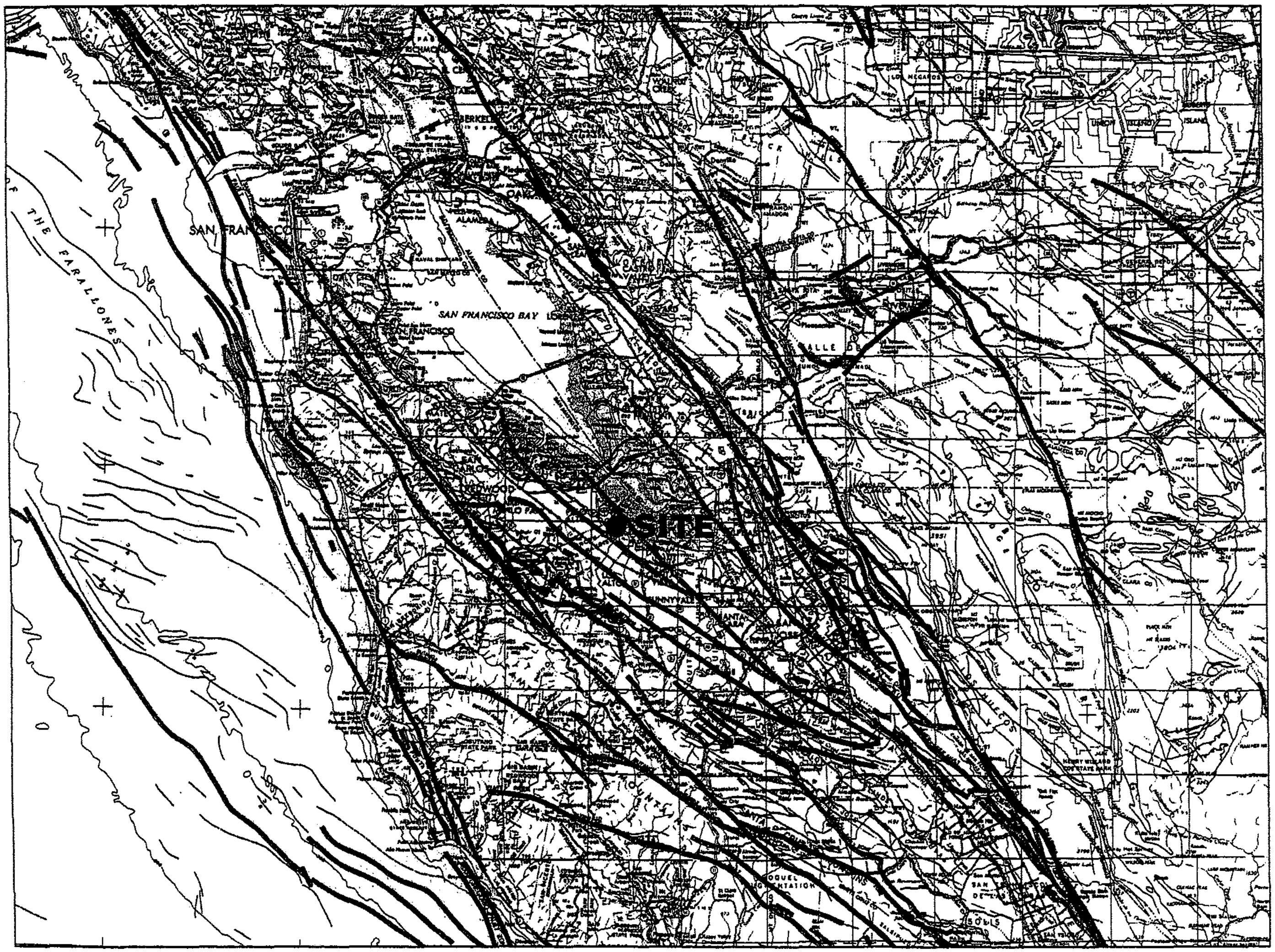
Base by Towill, Inc., dated 4/2/99.

SITE PLAN
MATADERO CREEK PROPOSED DOWNSTREAM BYPASS
Palo Alto, California

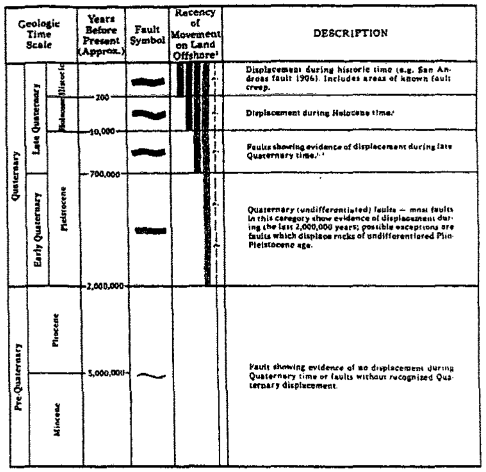
LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 2
1453-1G

8/01'EB



Note: Some faults highlighted in purple are not considered active (Holocene Movement) by the State of California.



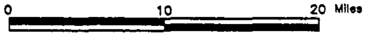
Geologic Time Scale			Years Before Present (Approx.)	Fault Symbol	Recency of Movement on Land Offshore	DESCRIPTION
Quaternary	Late Quaternary	Historic				Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.
		Holocene	200			Displacement during Holocene time.
		Pleistocene	10,000			Faults showing evidence of displacement during late Quaternary time.
	Early Quaternary		700,000			Quaternary (undifferentiated) faults — most faults in this category show evidence of displacement during the last 2,000,000 years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age.
Pre-Quaternary		Pliocene	2,000,000			
		Miocene	5,000,000			Fault showing evidence of no displacement during Quaternary time or faults without recognized Quaternary displacement.

Base map is a composite of part the San Francisco 1:250,000 scale map (reference code 37 122–A1–TF–250–00, 1980) and the San Jose 1:250,000 scale map (reference code 37 120–A1–TF–250–00, 1969). For cartographic details, refer to these maps. Bathymetric information is not intended for navigational purposes.

Transverse Mercator Projection 10,000–meter Universal Transverse Mercator grid, zone 10.

Minor corrections and additions to culture by California Division of Mines and Geology 1987.

From: Bortugno & others (1991)



Scale 1:500,000

REGIONAL FAULT MAP

MATADERO CREEK PROPOSED DOWNSTREAM BYPASS
Palo Alto, California

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 3
1453-1G

Division of Mines and Geology, James F. Davis, State Geologist

6/01'88

Appendix A

APPENDIX A
FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using truck-mounted, rotary-wash auger drilling equipment. Four 3-inch-diameter exploratory borings were drilled on July 5 and 6 2001, to a maximum depth of 25 feet. The approximate locations of the exploratory borings are shown on the Site Plan, Figure 2. The soils encountered were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). The logs of the borings, as well as a key to the classification of the soil, are included as part of this appendix.

The locations of borings were approximately determined by pacing from existing site boundaries reference. Elevations of the borings were determined by interpolation from plan contours. The locations and elevations of the borings should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. The standard penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The 2-inch O.D. split-spoon sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration (ASTM D1586). 2.5-inch I.D. samples were obtained using a Modified California Sampler driven into the soil with the 140-pound hammer previously described. Relatively undisturbed samples were also obtained with 2.875-inch I.D. Shelby Tube and Pitcher Barrel samplers which were hydraulically pushed and mechanically pushed, respectively. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows required to drive the last 12 inches. The various samplers are denoted at the appropriate depth on the boring logs and symbolized as shown on Figure A-1.

Field tests included an evaluation of the undrained shear strength of soil samples using a Torvane device, and the unconfined compressive strength of the soil samples using a pocket penetrometer device. The results of these tests are presented on the individual boring logs at the appropriate sample depths.

The attached boring logs and related information depict subsurface conditions at the locations indicated and on the date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition, any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

* * * * * * * * * * * * *

PRIMARY DIVISIONS			SOIL TYPE		SECONDARY DIVISIONS
COARSE GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (Less than 5% Fines)	GW	●	Well graded gravels, gravel–sand mixtures, little or no fines
			GP	○	Poorly graded gravels or gravel–sand mixtures, little or no fines
		GRAVEL WITH FINES	GM	○	Silty gravels, gravel–sand–silt mixtures, plastic fines
			GC	▨	Clayey gravels, gravel–sand–clay mixtures, plastic fines
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (Less than 5% Fines)	SW	⁘	Well graded sands, gravelly sands, little or no fines
			SP	⁘	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH FINES	SM	▥	Silty sands, sand–silt–mixtures, non–plastic fines
			SC	▨	Clayey sands, sand–clay mixtures, plastic fines
FINE GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT IS LESS THAN 50 %		ML	▥	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	▨	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	☰	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS LIQUID LIMIT IS GREATER THAN 50 %		MH	▥	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	▨	Inorganic clays of high plasticity, fat clays
			OH	≋	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			PT	ѱ	Peat and other highly organic soils

DEFINITION OF TERMS

U.S. STANDARD SIEVE SIZE — CLEAR SQUARE SIEVE OPENINGS

200 — 40 — 10 — 4 — 3/4" — 3" — 12"

SILTS AND CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

0.08 — 0.4 — 2 — 5 — 19 — 76mm

GRAIN SIZES

☒	TERZAGHI SPLIT SPOON STANDARD PENETRATION
⧗	MODIFIED CALIFORNIA
▯	D&M UNDERWATER SAMPLER
■	SHELBY TUBE
○	NO RECOVERY

SAMPLERS

SAND AND GRAVEL	BLOWS/FOOT*
VERY LOOSE	0–4
LOOSE	4–10
MEDIUM DENSE	10–30
DENSE	30–50
VERY DENSE	OVER 50

RELATIVE DENSITY

SILTS AND CLAYS	STRENGTH+	BLOWS/FOOT*
VERY SOFT	0–1/4	0–2
SOFT	1/4–1/2	2–4
MEDIUM STIFF	1/2–1	4–8
STIFF	1–2	8–16
VERY STIFF	2–4	16–32
HARD	OVER 4	OVER 32

CONSISTENCY

*Number of blows of 140 pound hammer falling 30 inches to drive a 2–inch O.D. (1–3/8 inch I.D.) split spoon (ASTM D–1586).
+Unconfined compressive strength in tons/sq.ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D–1586), pocket penetrometer, torvane, or visual observation.

KEY TO EXPLORATORY BORING LOGS

Unified Soil Classification System (ASTM D–2487)

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FIGURE A–1

EXPLORATORY BORING: EB-3

Sheet 1 of 1

DRILL RIG: FAILING 1500
BORING TYPE: ROTARY WASH
LOGGED BY: BAH
START DATE: 7-6-01 FINISH DATE: 7-6-01

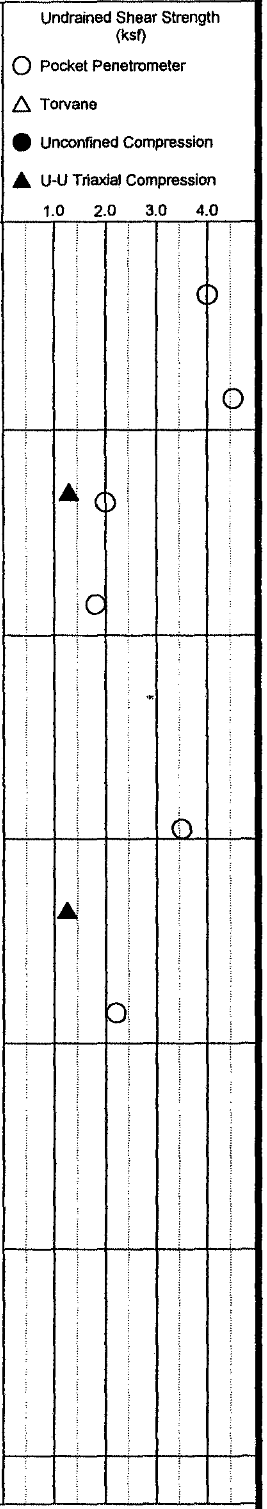
PROJECT NO: 1453-1G
PROJECT: MATADERO CREEK BYPASS
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 20.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 5 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
5.0	0	**SILTY CLAY (CL) [FILL]** very stiff to hard, damp, dark gray-brown to gray, some fine to coarse sand, low to moderate plasticity	CL	34	21	85	
				51	21	89	
	5			25	16	105	
				22	38	83	
-4.5	10	**SILTY CLAY (CH)** medium stiff, wet, dark gray to blue gray, possible bay mud, high plasticity	CH				
-8.0		**SILTY CLAY (CL)** stiff to very stiff, wet, olive-brown, trace fine sand, trace coarse sand, low plasticity	CL				
	15			45	18	111	
					21	106	
				23	20	106	
-15.0	20	Bottom at 20 feet					
	25						
	30						



GROUND WATER OBSERVATIONS:

LA CORP.GDT 9/26/01 MV* BRW

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

EXPLORATORY BORING: EB-4

Sheet 1 of 1

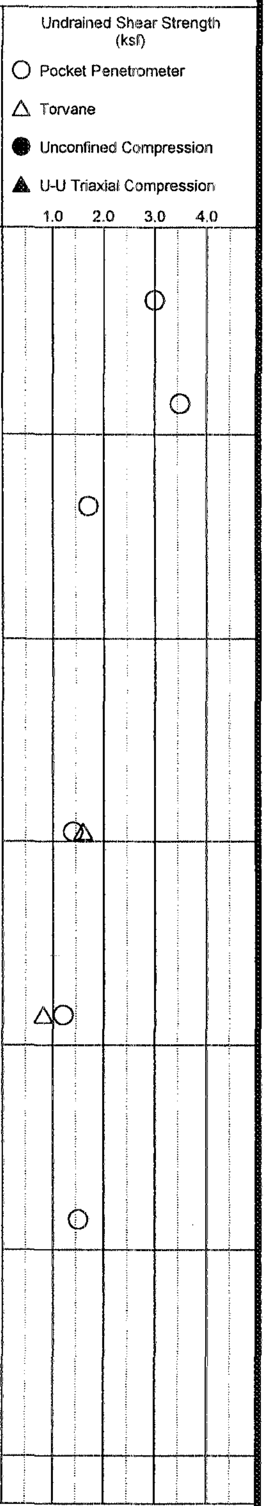
DRILL RIG: FAILING 1500
BORING TYPE: 8 INCH HOLLOW-STEM AUGER
LOGGED BY: BAH
START DATE: 7-5-01 FINISH DATE: 7-5-01

PROJECT NO: 1453-1G
PROJECT: MATADERO CREEK BYPASS
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 25.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

SURFACE ELEVATION: 6 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
6.0	0	6 to 8 inches of recycled aggregate base, concrete, and gravel	GPS				
5.3		**SILTY CLAY (CL) [FILL]** very stiff, damp, dark gray-brown, some fine to coarse sand, some fine gravel, low to moderate plasticity	CL	26 36	10 8	125 115	
0.5	5	**SILTY CLAY (CL)** stiff, moist, dark gray-brown, trace coarse sand, moderate plasticity Plasticity Index = 31, Liquid Limit = 44	CL	15	16	109	
-4.3	10	**SILTY CLAY (CH)** medium stiff, moist, blue gray, possible bay mud, high pasticity	CH				
-7.0		**SILTY CLAY** stiff, moist, bluish gray, some fine sand, medium stiff, color to greenish gray	CL	17 51	27 33	93 101	
-13.5	20	**SANDY CLAY** stiff, moist, greenish gray, fine sand, low plasticity	CL	33	20	105	
-19.0	25	Bottom at 25 feet					



GROUND WATER OBSERVATIONS:

∇: FREE GROUND WATER MEASURED DURING DRILLING AT 15.0 FEET

EXPLORATORY BORING: EB-5

Sheet 1 of 1

DRILL RIG: FAILING 1500
BORING TYPE: ROTARY WASH
LOGGED BY: BAH
START DATE: 7-5-01 FINISH DATE: 7-5-01

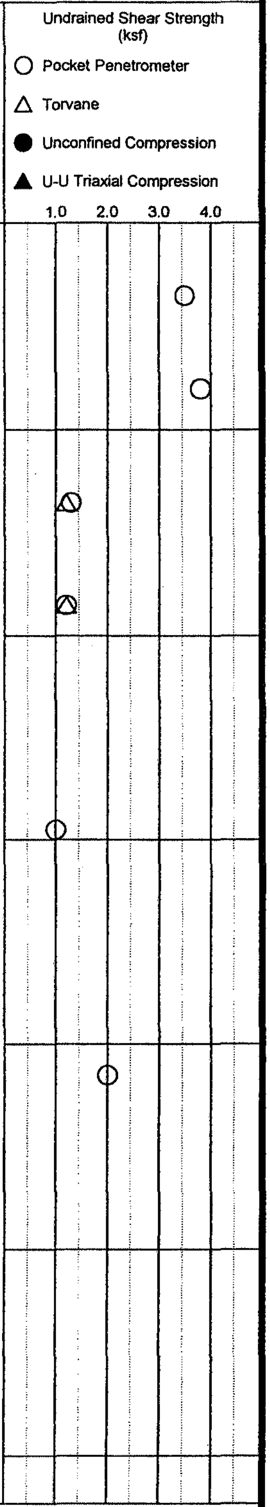
PROJECT NO: 1453-1G
PROJECT: MATADERO CREEK BYPASS
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 25.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 6 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
6.0	0	6 to 8 inches recycled aggregate base, broken concrete, and gravel	GPS				
5.3		**SANDY CLAY (CL) [FILL]** very stiff to hard, damp, dark gray-brown, fine to coarse sand, some fine gravel, low plasticity	CL	39	11	118	
				50/6"			
0.5	5	**SILTY CLAY (CL)** stiff, moist, greenish brown, trace fine sand, trace fine gravel, low to moderate plasticity	CL	10	24	91	
	10			8	24	105	
-4.8		**SILTY CLAY (CH)** soft to medium stiff, moist, blue gray, possible bay mud, high plasticity	CH				
-8.0	15	**SILTY CLAY (CL)** stiff, moist, bluish gray, trace fine to coarse gravel, low plasticity	CL	27	52	88	
-12.0	20	**SANDY CLAY (CL)** stiff to very stiff, moist, light brown/ blue grey mottled, fine sand clayey sand lense	CL	35	18	112	
-17.0		**CLAYEY SAND (SC)** medium dense, moist, bluish gray, fine to medium sand	SC	22	18	110	37
-19.0	25	Bottom at 25 feet					
	30						



GROUND WATER OBSERVATIONS:

LA CORP.GDT 9/26/01 MV* BRW

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

EXPLORATORY BORING: EB-6

Sheet 1 of 1

DRILL RIG: FAILING 1500
BORING TYPE: 8 INCH HOLLOW-STEM AUGER
LOGGED BY: BAH
START DATE: 7-5-01 FINISH DATE: 7-5-01

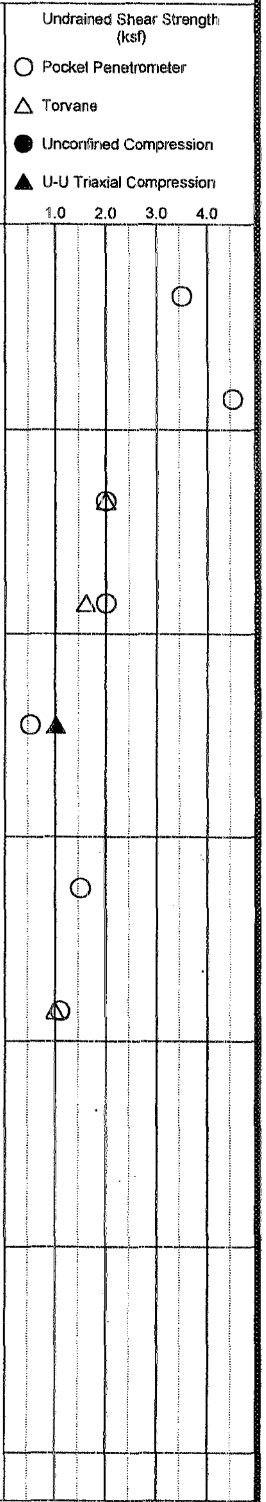
PROJECT NO: 1453-1G
PROJECT: MATADERO CREEK BYPASS
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 20.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

MATERIAL DESCRIPTION AND REMARKS

SURFACE ELEVATION: 6 FT. (+/-)

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
6.0	0	3 to 5 inches aggregate base	GPS				
5.6		**SILTY CLAY (CL) [FILL]** very stiff to hard, damp, dark gray-brown, some fine to coarse sand, low to moderate plasticity	CL	26 18	13 12	 97	
0.5	5	**SILTY CLAY (CH)** stiff, moist, dark gray-brown, trace coarse sand, moderate plasticity	CL	27 13	40 30	80 87	
-3.8 ▼	10	**SILTY CLAY (CH)** medium stiff, moist, bluish gray, high plasticity Plasticity Index = 49, Liquid Limit = 66	CH		29 33	91 87	
-7.5 ▽		**SILTY CLAY (CL)** stiff, wet, olive, some fine sand, trace coarse sand, low plasticity	CL	36 13	23 26	97 98	
-14.0	20	Bottom of Boring at 20 feet					
	25						
	30						



GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 14.0 FEET

▼: FREE GROUND WATER MEASURED FOLLOWING DRILLING AT 10.0 FEET

LA_CORP.GDT 9/26/01 MV* BRW

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Appendix B

APPENDIX B
LABORATORY PROGRAM

The laboratory testing program was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site and to aid in verifying soil classification.

Moisture Content: The natural water content was determined (ASTM D2216) on 25 samples of the materials recovered from the borings. These water contents are recorded on the boring logs at the appropriate sample depths.

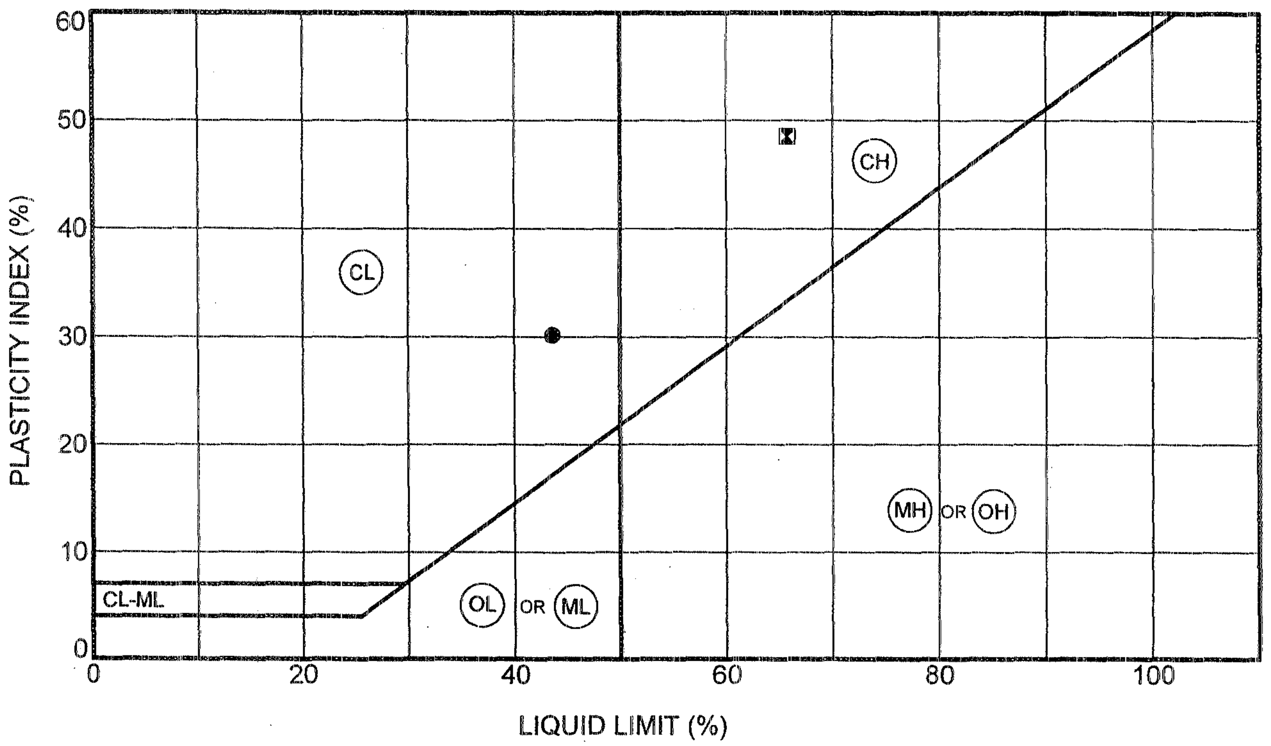
Dry Densities: In place dry density determinations (ASTM D2937) were performed on 22 samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Plasticity Index: Plasticity Index determinations (ASTM D4318) were performed on 2 samples of the subsurface soils to measure the range of water contents over which these materials exhibit plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of these tests are presented on Figure B-1 and on the logs of the borings at the appropriate sample depths.

Washed Sieve Analysis: The percent soil fraction passing the No. 200 sieve (ASTM D1140) was determined on one sample of the subsurface soil to aid in the classification of these soils. Results of this test are shown on the log of Boring EB-5 at the appropriate sample depth.

Unconfined Compression: Unconfined compression tests (ASTM D2166) were performed on 3 undisturbed sample of the clayey soils to evaluate the undrained shear strengths of these materials. Samples tested had a diameter of 2.8 inches and a height-to-diameter ratio of at least 2. Failure was taken as the peak normal stress. Results of these tests are presented on the boring logs at the appropriate sample depths.

Consolidation: One consolidation test (ASTM D2435) was performed on an undisturbed sample of the subsurface clayey Bay Mud soils to assist in evaluating the compressibility property of this soil. Results of the consolidation test is presented graphically in this appendix.



Symbol	Boring No.	Depth (ft.)	Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No. 200 Sieve	Unified Soil Classification Description
●	**EB-4**	**5.5**	**16**	**44**	**13**	**31**		**SILTY CLAY (CL)**
☒	**EB-6**	**11.0**		**66**	**17**	**49**		**SILTY CLAY (CH)**

LA_CORP.GDT 8/20/01 MV* BRW

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

PLASTICITY CHART AND DATA

Project: MATADERO CREEK BYPASS CHANNEL
Location: PALO ALTO, CA
Project No.: 1453-1G

FIGURE B-1

Appendix C

APPENDIX C

PREVIOUS SURFACE INFORMATION BY OTHERS

Project No. 5084-E
8 November 1983

LOGGED BY RR	**DATE DRILLED** 10/18/83	**BORING DIAMETER** 6"	**BORING NO.** 5

Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION X line approx. Sta. 2+50±	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
	5-1b		Light brown pebbly Clayey SILT FILL, loose, dry to damp	ML/CL	25		92	14	
	5-1a						91	26	
			Mottled & laminated dark gray/light gray CLAY FILL, loose, damp						
5	5-2		Dark gray to black pebbly CLAY; dense, moist, stiff; with med. blue gray Sandy streaks (native)	CH	20		99	24	Direct Shear C=1020 psf Ø=28°
10	5-3		Mottled dark-gray/medium gray pebbly Sandy CLAY, dense, stiff, moist		21		84	37	
			Bottom of boring @ 11.5 feet, dry.						

TERRASEARCH inc. **FIGURE NO.** 7 - LOG OF TEST BORING

Project No. 5084-E
8 November 1983

LOGGED BY RR **DATE DRILLED** 10/18/83 **BORING DIAMETER** 6" **BORING NO.** 6

Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION "Y" line approx. Sta. 4+	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t.s.f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
			Light gray to med. brown pebbly Clayey SILT-Fill	ML					
	6-1		Med. red-brown Sandy pebbly Clayey SILT-Fill		16		--	7	
5									
			▼ (W.L.=10/18/83 @ 7')						
	6-2		Med. blue gray with brown mottling, Silty CLAY, soft to firm, very moist to wet	CH	7		66	57	Direct Shear C=300 psf Ø=13°
10			Stiffer @ 11'						
15									
20									
	6-3b 6-3a		Mottled red-brown/gray SILT; locally pebbly and/or Clayey; soft, friable, wet		20		101 97	26 27	
			Bottom of boring @ 21.5 feet, water @ 7.0 feet.						

TERRASEARCH inc. **FIGURE NO.** 8 - LOG OF TEST BORING

LOGGED BY RR **DATE DRILLED** 10/18/83 **BORING DIAMETER** 6" **BORING NO.** 7

Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION "Y" line approx. Sta. 12+	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t.s.f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
	7-1		Med. brown pebbly CLAY Fill, soft, loose, porous, moist	CL	8		105	17	UC=1436 psf
			▼ (W.L.=10/18/83 @ 3.5')						
5	7-2		Coarse pebbly SAND lens) -Fill soft Silty CLAY)	CL	5		103	24	
			Soft gray Sandy CLAY (native)	CH					
			Firmer @ 8.5'						
10	7-3		Mottled light to med. gray Clayey SILT firm, dense		25		106	22	
			Bottom of boring @ 10.5 feet, water @ 3.5 feet, (?) (caved-in)						

TERRASEARCH inc. **FIGURE NO.** 9 - LOG OF TEST BORING

APPENDIX B

Laboratory Investigation

Summary of Laboratory Test Results

Compaction Curves

Consolidation Test Results

LABORATORY INVESTIGATION

The laboratory testing program was directed toward a determination of the physical and engineering properties of the soil underlying the proposed flood wall and levee alignments.

Moisture content and dry density tests were performed on representative undisturbed soil samples in order to determine the consistency of the soil, the moisture variation throughout the explored soil profile, the potential for consolidation, and the relative compaction of the near surface soils.

Atterberg limits tests were performed to differentiate between materials of appreciable plasticity and slightly plastic or non-plastic materials and to facilitate classification of the soils based upon the unified soils classification system.

The strength parameters of the wall and levee foundation soils were determinted by Direct Shear tests and Unconfined Compression tests performed in our laboratory on undisturbed soil samples. The Unconfined Compression tests (q_u tests) were performed on saturated, undisturbed specimens to determine the cohesion (no load strength) for use in analysing the bearing strength and stability of banks from a general strength standpoint. The drained direct shear tests were also utilized to evaluate slope stability and bearing strength of the various soils encountered.

The results of the aforementioned laboratory testing program are presented in Table I of this Appendix.

Field Penetration-Resistance tests and Pocket Penetrometer tests assisted in the determination of strength parameters. The Standard Penetration Resistance and Pocket Penetrometer test result values are shown on the "Logs of Test Borings," Appendix A.

Compaction curves were obtained on the near surface fill material at the existing Matadero Creek levee. The compaction curves were obtained in accordance with ASTM D1557-78 Test Procedure. The results are shown graphically on Figure Nos. 11 and 12.

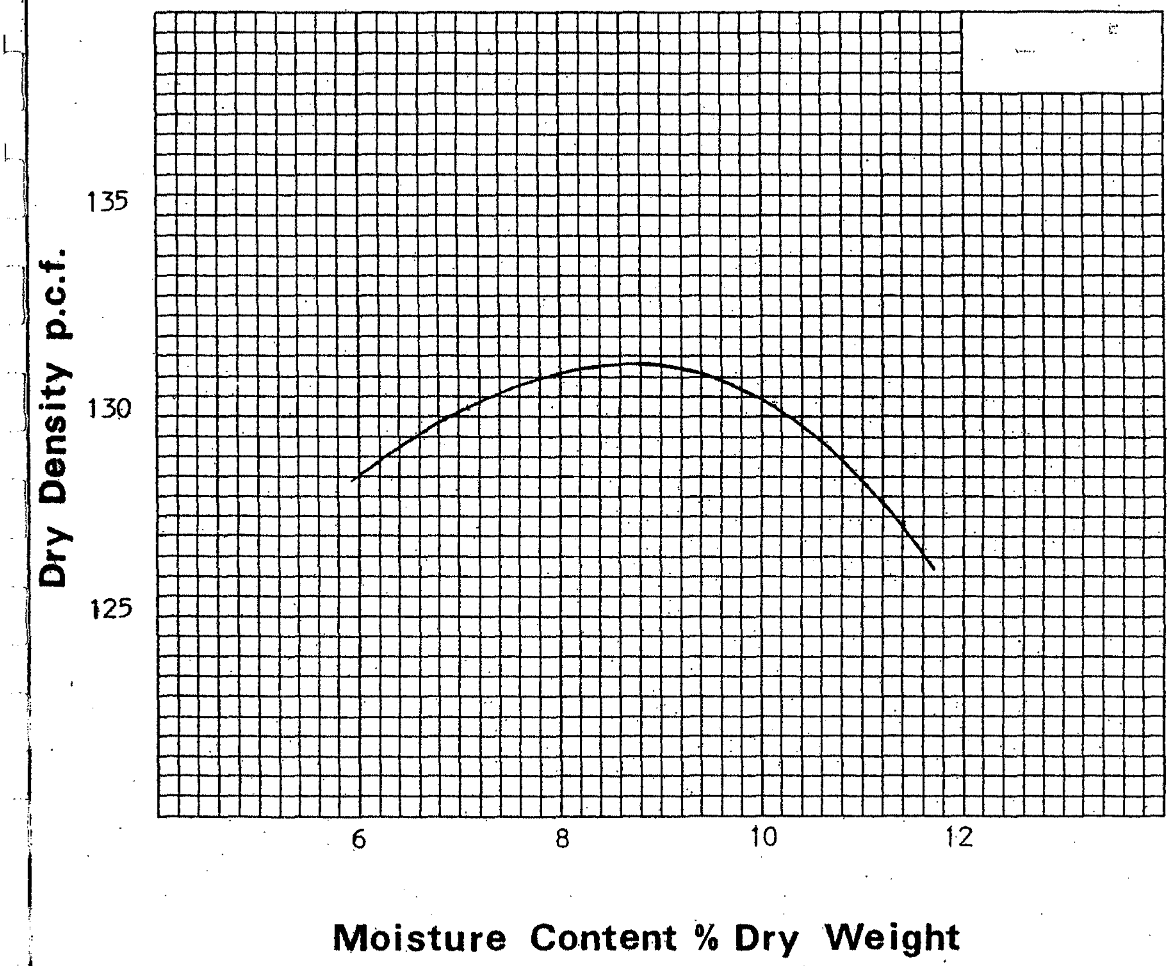
Consolidation tests were performed on the most highly compressible lense of Bay Mud encountered below the existing levee in order to evaluate the potential consolidation to be anticipated below the proposed fills. The results are shown graphically on Figure Nos. 13 through 14.

TABLE I

Summary of Laboratory Test Results

Hole No.	Depth (ft.)	Dry Density (p.c.f.)	Moisture Content (% Dry wt.)	Atterberg Limits		Unconfined Compressive Strength	Direct Shear	
				Liquid Limit (%)	Plasticity Index		Cohesion (p.s.f.)	Angle of Internal Friction (degree)
1-1	2.0	114	17	33	16	2365		
1-2	7.0	100	26					
1-3b	20.5	91	33					
1-3a	21.0	69	25					
2-1	2.0	72	46					
2-2	5.0	62	58					
2-3	10.0	76	46					
3-1	1.0	72	44			2393		
3-2	3.0	55	74					
3-3b	10.5	47	99					
3-3a	11.0	51	83					
3-4b	20.5	113	18					
3-4a	21.0	105	21					
4-1	1.0	70	50					
4-2	5.0	35	134					
4-3	10.0	44	102					
5-1b	2.5	92	14					
5-1a	3.0	91	26					
5-2	5.0	99	24				1020	28
5-3	10.0	84	37					
6-1	3.0	---	7					
6-2	8.0	66	57				300	13
6-3b	20.5	101	26					
6-3a	21.0	97	27					
7-1	1.0	105	17			1436		
7-2	4.0	103	24					
7-3	9.0	106	22					
8-1	1.5	---	--	70	43			
8-2	5.0	80	41					

COMPACTION TEST



Sample No.
A

Sample Depth
0-1

Sample Description
Lt. brown
Clayey SAND
w/some Gravel

Specific Gravity

Test Designation
ASTM D1557-78

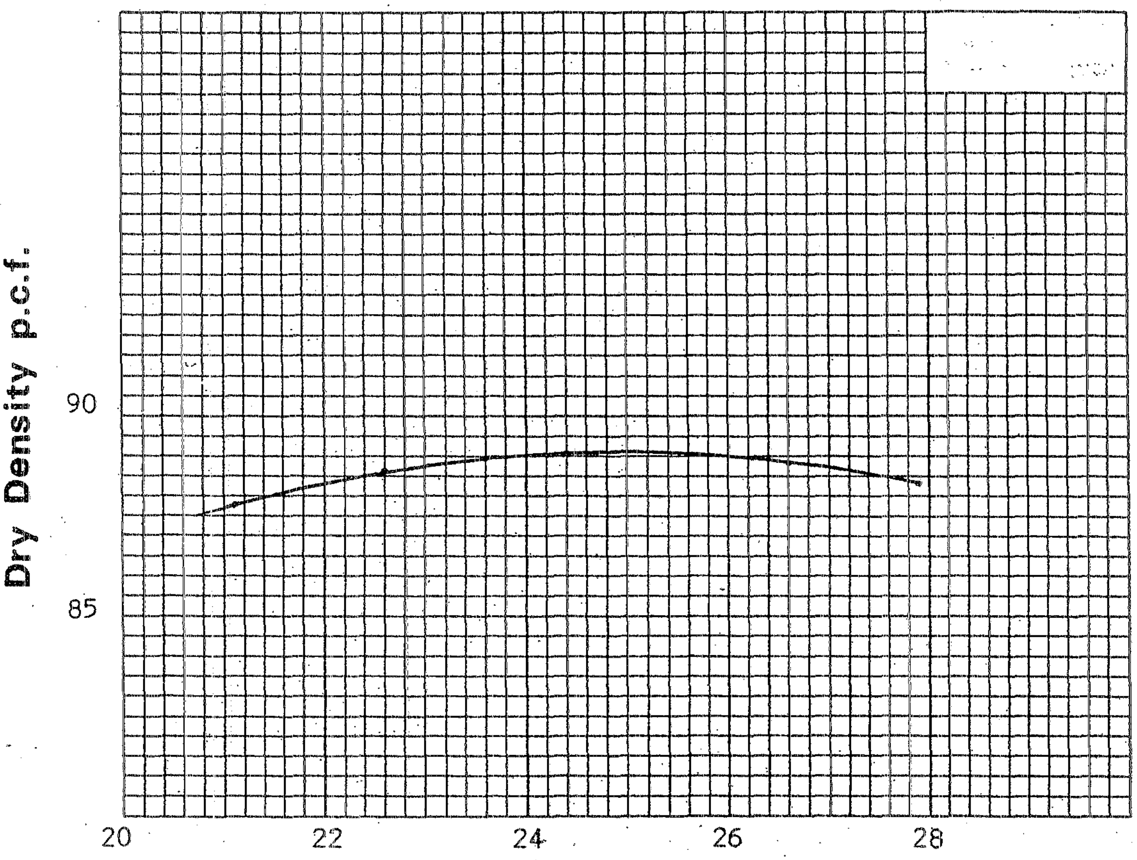
Maximum Dry Density (p.c.f.)
131.4

Optimum Moisture Content (%)
8.8

TERRASEARCH INC. **Figure No.** 11 - COMPACTION TEST

COMPACTION TEST

("W" line approximate
Sta 10+00)



Moisture Content % Dry Weight

Sample No.
B

Sample Depth
0-2

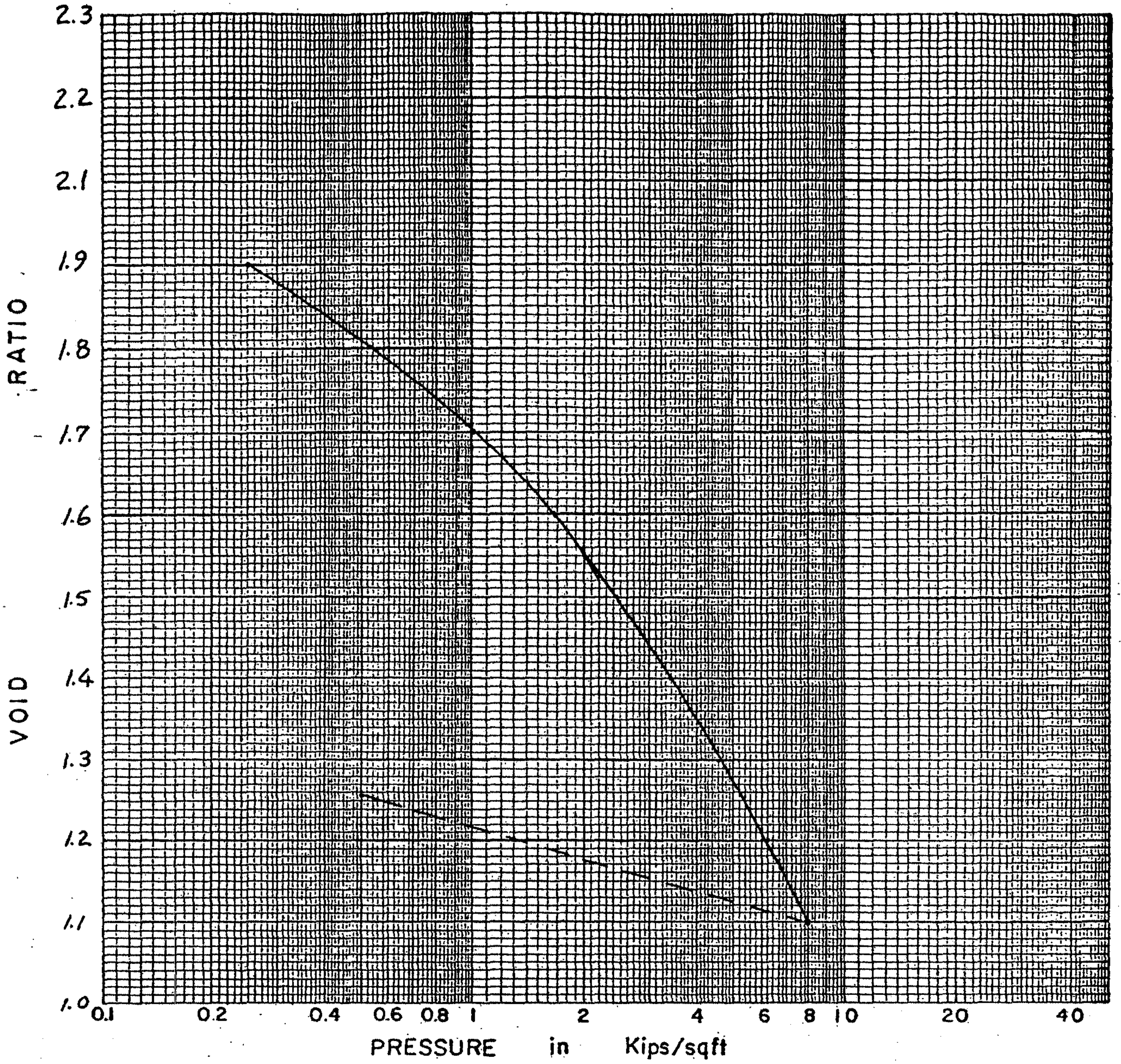
Sample Description
Gray brown
Silty CLAY
w/fine organics

Specific Gravity

Test Designation
ASTM D1557-78

Maximum Dry Density (p.c.f.)
89.2

Optimum Moisture Content (%)
25.0



Type of Sampler 2-1/2" OD Split tube		Before Test	After Test
Diameter 1.900 (in) O.D. Height 1.02 (in)	Moisture Content	98.9 %	64.2 %
Overburden Pressure Po = 1350 psf	Void Ratio	2.049	1.2598
Preconsolidation Pressure Pc = 1700 psf	Saturation		
Compression Index Cc = 0.85	Dry Density	pcf	
Coefficient of Consolidation Cv = cm^2/sec	P.I. 43	L.L. 70	Gs 2.30
Sample Description; Dark Gray Silty CLAY	Sample No. 3-3b	Depth 10.5 (ft)	

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FIGURE NO. 13 - CONSOLIDATION TEST

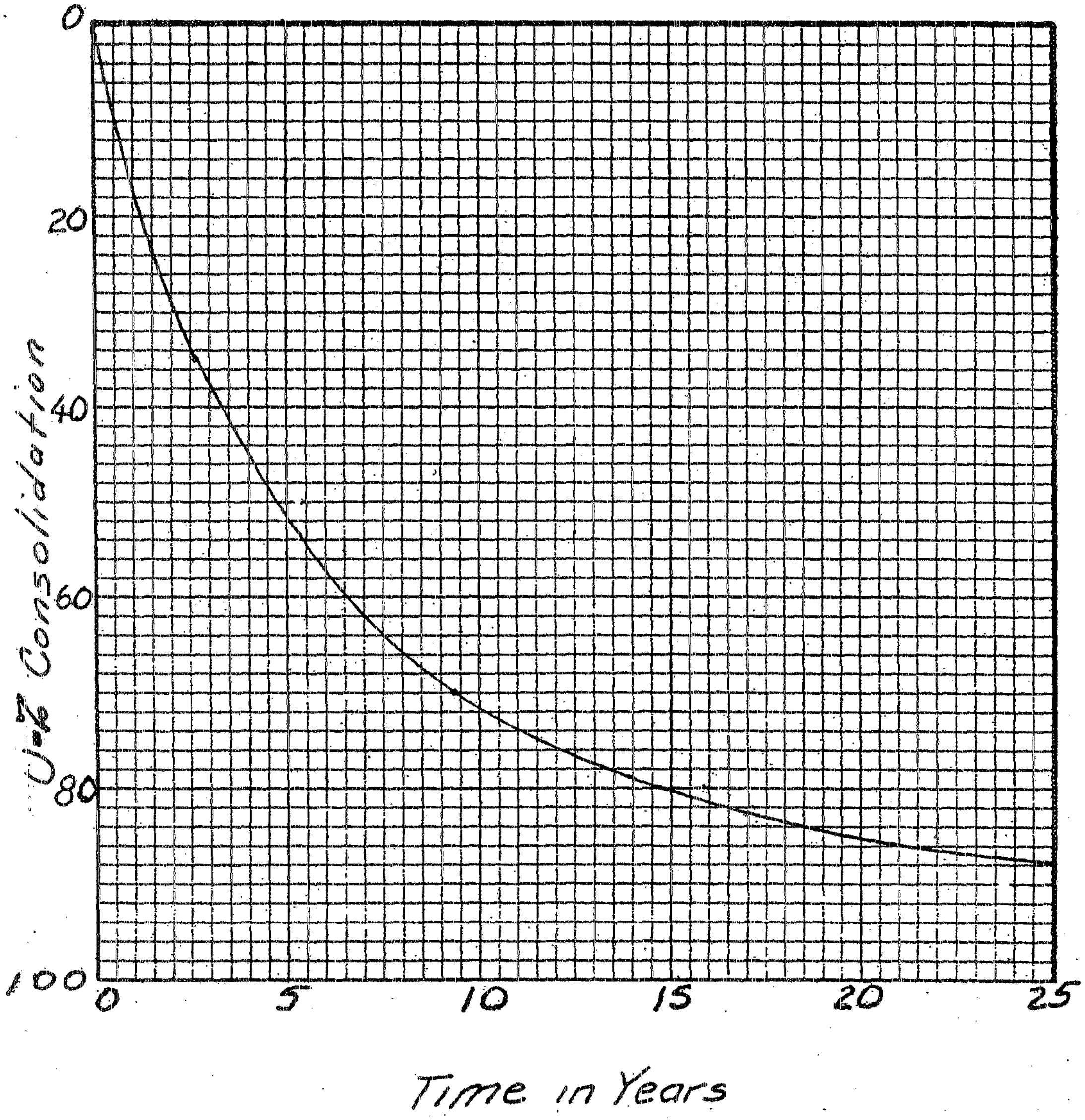

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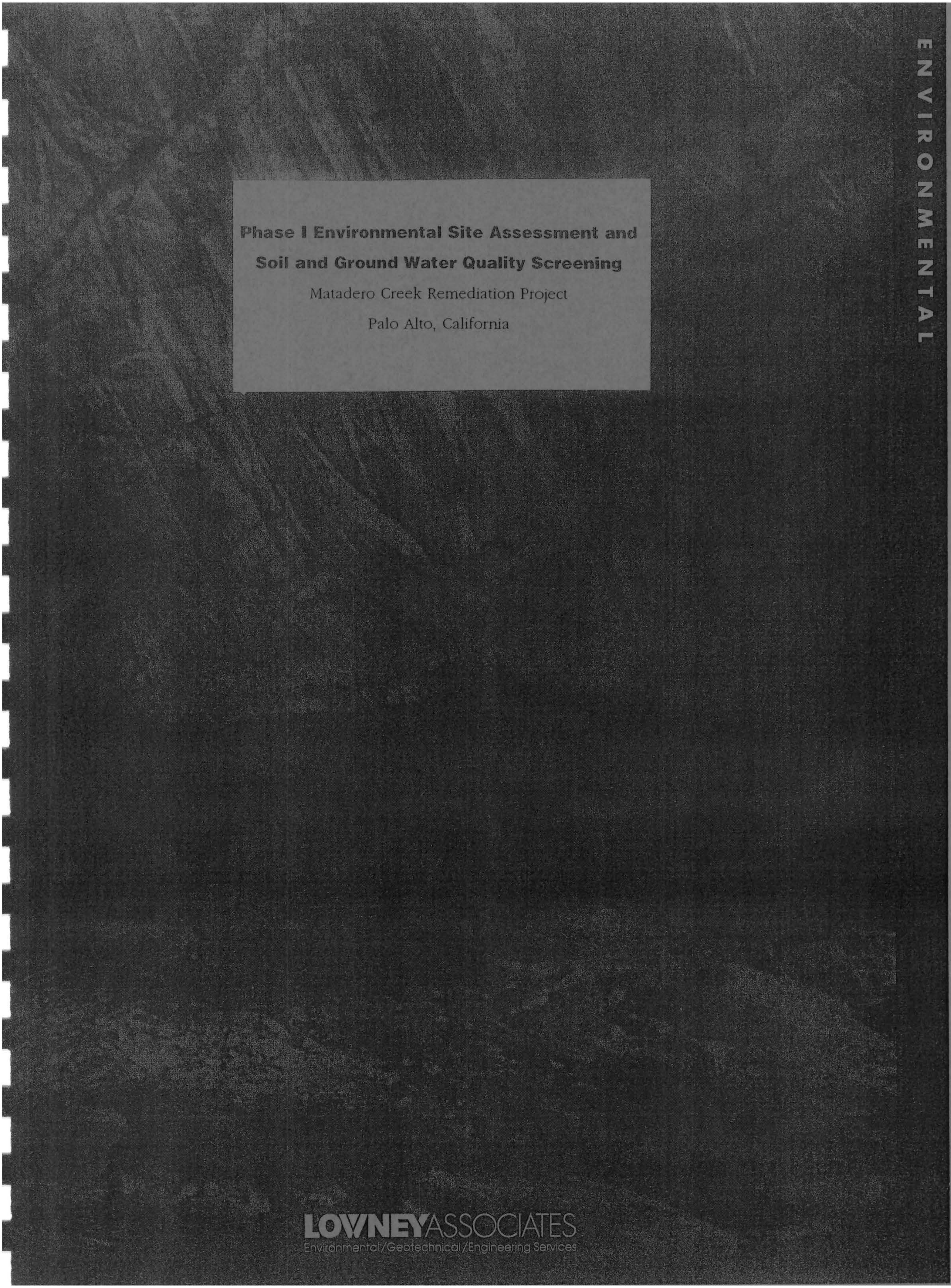
FIGURE NO. 14 - RATE OF CONSOLIDATION



Phase I Environmental Site Assessment and Soil and Ground Water Quality Screening

Matadero Creek Remediation Project

Palo Alto, California

ENVIRONMENTAL

LOWNEY ASSOCIATES

Environmental/Geotechnical/Engineering Services

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Environmental/Geotechnical/Engineering Services

Phase I Environmental Site Assessment and Soil and Ground Water Quality Screening

Matadero Creek Remediation Project
Palo Alto, California

This report has been prepared for:

Schaaf & Wheeler

100 North Winchester Boulevard, Suite 200, Santa Clara, California 95050

July 15, 1999

Project No. 1453-1A

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PHASE I ENVIRONMENTAL SITE ASSESSMENT AND
SOIL AND GROUND WATER QUALITY SCREENING
MATADERO CREEK REMEDIATION PROJECT
PALO ALTO, CALIFORNIA

1.0 INTRODUCTION

1.1 Purpose

This Phase I environmental site assessment and soil and ground water quality screening was performed for Schaaf & Wheeler and the Santa Clara Valley Water District (SCVWD). We understand the SCVWD is considering expanding the Matadero Creek channel between Alma Street and Highway 101 for flood control purposes.

The purpose of this study was to document environmental concerns along the creek channel related to current and historic chemical use and to evaluate the potential for a release of hazardous materials from on- or off-site sources that could significantly impact the soil and/or ground water quality in and around the creek channel.

1.2 Scope of Work

As requested, the scope of work for this study was performed in general accordance with the American Society for Testing and Materials (ASTM) Designation E 1527-97 as outlined in our agreement dated March 24, 1999. The scope of work included the following tasks.

- ▼ Reconnaissance of the creek channel and adjacent properties for readily observable indications of current or historic activities that have or could significantly impact the creek.
- ▼ Review of readily available topographic maps and reports to evaluate local hydrogeologic conditions including anticipated ground water depth and flow direction.
- ▼ Review of readily available documents, maps, and aerial photographs, and interviews with knowledgeable persons to evaluate past land uses.
- ▼ Review of a regulatory agency database report to evaluate the potential impact to the creek channel from reported contamination incidents at nearby facilities.
- ▼ Review of available regulatory agency files to obtain information about the use and storage of hazardous materials in the vicinity of the creek channel and to

investigate the compliance and permit status of vicinity facilities suspect for significantly impacting the channel.

Our scope of services did not include sampling or analysis of air or soil samples. The limitations of this Phase I environmental assessment are presented in Section 7.0; the terms and conditions of our agreement are presented in Appendix A.

2.0 SITE RECONNAISSANCE

2.1 Site Location and Ownership

The approximately 1½-mile-long portion of Matadero Creek included in this study, shown in Figures 1 and 2, is located between Alma Street and Highway 101 in Palo Alto, California 94303. The project portion of the creek is located in a primarily residential area. The creek channel and associated right-or-way are currently owned by the City of Palo Alto.

2.2 Topographic Features and Hydrogeology

Based on U.S. Geologic Survey (USGS) topographic maps, the creek channel elevation ranges from approximately 5 to 30 feet above mean sea level. Even though we have not reviewed any site-specific ground water data, based on our concurrent geotechnical investigation performed for the project, the shallow water-bearing zone is encountered at depths of 9 to 16 feet. Based on information obtained during our file reviews (Section 4.1), ground water beneath the creek likely flows northeast, following surface water within the creek, towards the San Francisco Bay.

2.3 Site Visit

Our representative, environmental engineer Gretchen Snoey, walked the accessible portions of the creek channel on May 14, 1999 and was unaccompanied. At the time of our site visit, the creek channel was observed to be concrete-lined, with the water in the channel covered with algae in most locations. The creek was observed to be running in the northeasterly direction, toward the San Francisco Bay.

2.4 Site Vicinity Reconnaissance

To evaluate adjacent land use, we performed a drive-by survey. The adjacent vicinity was mainly residential housing and apartments. Two parks, tennis courts, and a church also were observed adjacent to the creek. An ARCO service station was located at the southeastern corner of Middlefield Road and Matadero Creek; a Pacific Gas and Electric Company (PG&E) switching station was located on both sides of the creek at the intersection with Highway 101. Of the facilities observed adjacent to the creek, the ARCO station and the switching station may use, handle, and/or store significant quantities of hazardous materials.

High power transmission lines crossed the creek parallel to Highway 101. Two high-voltage underground cables reportedly run parallel to the channel along the north bank of the levee.

2.5 Interview

During our study, we contacted Mr. Sam Zuccaro with the City of Palo Alto, Electrical Engineering Department regarding the two underground cables running along the north side of the creek. According to Mr. Zuccaro, the cables are surrounded by cooling oil; the oil reportedly does not contain PCBs and is a mixture of Suniso 6 oil and polybutylene. The cables reportedly are 20 to 30 years old. They are not secondarily contained since they were installed before regulations required secondary containment. Mr. Zuccaro said that to his understanding, utilities are exempt from secondary containment requirements. No leaks have been reported in the history of the cables; a monitoring system to detect leaks reportedly is present.

3.0 HISTORICAL REVIEW

3.1 Photograph and Map Review

To evaluate the site history, we reviewed the following.

- Available stereo-paired aerial photographs (1939, 1960, 1965, 1974, and 1981) from the USGS Library in Menlo Park, California.
- Available USGS 15-minute and 7.5-minute topographic maps (1899, 1937, 1953, 1961, 1968, 1981, and 1991).
- Historic Sanborn fire insurance maps were requested from Sanborn Mapping and Geographic Information Service (Sanborn GIS) in Pelham, New York. Information obtained by us during the study indicated that no Sanborn maps were available.

Our observations are summarized below.

1899: On the 1899 topographic map, the project portion of the creek was not shown in its current location. A Southern Pacific Railroad (SPRR) line was present to the south of the creek. The vicinity appeared to be mostly undeveloped.

1937: The 1937 topographic map appeared to be similar to the 1899 topographic map.

1939: On the 1939 aerial photograph, the current Matadero Creek channel appeared present. The vicinity appeared to be mainly undeveloped with a few houses adjacent to the creek.

1953: On the 1953 topographic map, between Cowper Street and Middlefield Road, Hoover School was present. The area surrounding the creek near Highway 101 appeared to be undeveloped. The rest of the vicinity appeared to be residential.

1956: The creek appeared the same as in the 1939 aerial photograph. The vicinity south of Alma Street appeared to commercially developed. The vicinity between Cowper Street and Middlefield Road appeared to be an open field on the east of the channel and an open area with a few buildings, Hoover School, on the west side. The rest of the vicinity appeared to be residential.

1960: The vicinity appeared similar to the 1956 aerial photograph, except the residential areas appeared more dense. Near Middlefield Road on the west side of the channel, there appeared to be a church. A building, not appearing to be a gas station, was present in the current location of the ARCO Station. A gas station appeared to be adjacent to the south of its current location.

1961: The 1961 topographic map appeared similar to the 1953 topographic map, except that Hoover School and the church near Middlefield Road were present. A "Sewage Disposal" facility was located across Highway 101, approximately ¾ mile to the southeast.

1965: The site and vicinity appeared similar to the 1960 aerial photograph, except the area east of the channel between Cowper Street and Middlefield Road was residentially developed.

1968: The 1968 topographic map appeared similar to the 1961 topographic map.

1974: The 1974 aerial photograph appeared to be similar to the 1965 aerial photograph, except the area surrounding the channel near Highway 101 was developed with what appeared to be PG&E high power transmission towers and lines.

1981: The 1981 aerial photograph appeared similar to the 1974 aerial photograph. On the 1981 topographic map, the "Sewage Disposal" facility had expanded to be approximately 1/5 mile east of the site near Highway 101.

1991: The 1991 topographic map appeared similar to the 1981 topographic map, except Hoover Park was present in the approximate location of the previously present Hoover School.

3.2 Previous Environmental Reports

To further evaluate the environmental condition of the creek, we reviewed several reports that were provided to us by the SCVWD. The reports were for a section of Matadero Creek west of the project site and therefore did not contain significant information on the project portion of the creek.

4.0 REGULATORY RECORDS

4.1 City and County Agencies File Review

To obtain information on hazardous materials usage and storage at adjacent sites that were suspect for significantly impacting the channel, we requested readily available information at the Palo Alto Building Department (PABD), Palo Alto Fire Department (PAFD), and Santa Clara County Environmental Health Department (SCCEHD) pertaining to the ARCO station (2995 Middlefield Road) and PG&E switching station (3160 West Bayshore Road). We also reviewed readily available information at the SCVWD pertaining to the ARCO station. A representative at the SCCEHD said that no hazardous materials information was available for these sites; no information on the PG&E switching station was present at the PAFD or PABD. The information made available to us for the ARCO station by the PABD, PAFD, and SCVWD is summarized below; key documents are included in Appendix B.

Information at the PABD indicated that the ARCO station property has been occupied by a service station since at least 1972. Past owners have included Gulf Oil Corporation, Atlantic Richfield Company, and ARCO Petroleum Products Company, the current owner.

Information at the PAFD included several permits, reports, letters, and correspondences. It appears that at least two leaks from gasoline underground storage tanks (USTs) occurred at the service station, in 1986 and 1988. According to a letter from Pacific Environmental Group, Inc., dated January 24, 1989, one ground water monitoring well was installed in the former tank complex in 1986; up to 0.11 foot of floating product was present in the well. In 1987, five additional ground water monitoring wells were installed at the site. Ground water reportedly was encountered on-site at depths of 8 to 9 feet and the ground water flow direction was reported to the northeast. Several letters, newspaper articles, and reports indicated that an attempt to expand Matadero Creek occurred in 1988. At this time, significant quantities of gasoline-saturated soil were encountered at the ARCO property boundary near the creek. By 1991, several extraction and ground water monitoring wells were present on-site. Design of a ground water treatment system was still on-going. The 2995 Middlefield Road site is currently a leaking UST case under direction of the California Regional Water Quality Control Board (RWQCB).

Information at the SCVWD included several letters, correspondences, and reports. A gasoline release reportedly was discovered at the site in 1986 when the leaking UST was removed. Remedial investigation and activities began in 1987 which included installation and monitoring of numerous ground water monitoring wells, installation of extraction wells, air sparging and soil vapor extraction wells. In August 1988, as part of the SCVWD's flood control project, impacted soil was encountered along the southern edge of the creek channel; the source was presumed to be the former leaking UST at the ARCO station.

Several ground water monitoring reports were found dating from 1987 to 1999. Laboratory analysis of ground water samples collected in during the 1st quarter of 1999 from wells near and down-gradient of the former tank complex detected up to 11,000 ppb of total petroleum hydrocarbons as gas (TPHg), 37 ppb of benzene, and 1,100 ppb of MTBE. Analysis of samples from four wells located adjacent to Matadero Creek (MW-7, MW-8, MW-9, and MW-18) did not detect TPHg, benzene, or MTBE above laboratory detection limits. The locations of these wells, the 1st quarter 1999 sampling results, and ground water elevations are presented on the figures attached in Appendix B.

4.2 Regulatory Agency Database Report

During this study, a regulatory agency database report was obtained and reviewed to help establish whether contamination incidents have been reported within the vicinity of the creek channel. A list of the database sources reviewed, a detailed description of the sources, and a radius map indicating the location of the reported facilities relative to the project site are presented in Appendix C.

The project site, Matadero Creek at Highway 101, was listed as an ERNS (Emergency Response Notification System) site. This listing indicates that there has been a reported release of oil and/or other hazardous substances; no other information was reported. Based on the various database sources reviewed, nearby reported hazardous materials incidents are presented in Table 1.

Table 1. Nearby Hazardous Materials Incidents

Facility Name	Map ID No.	Address	Distance and Direction From Site	Potential Concern
ARCO	A3 through A7	2995 Middlefield Road	Adjacent southeast at Middlefield Road	LUST site: gasoline release in 1983; the abatement method reportedly included excavation and disposal/treatment of contaminated soil and pumping and treatment of contaminated ground water; floating product present; lead agency listed as SCVWD.
842 Wintergreen Avenue	11	842 Wintergreen Avenue	<1/8 mile southeast at Wintergreen Avenue	ERNS site; no other information reported.
Megher Property	F30	3070 Louis Road	<1/8 mile; up-gradient	Cortese and South Bay Region 2 site: no ground water contamination reported.
City of Palo Alto Refuse Disposal Site/Municipal Service Center	U79 and U80	3201 East Bayshore	<1/8 mile southeast at Highway 101	Active landfill site; waste includes construction/demolition, industrial, and mixed municipal. South Bay Region 2 and SLIC site; no other information reported.

5.0 SOIL AND GROUND WATER QUALITY SCREENING

5.1 Subsurface Investigation

On June 8 through 11, 1999, under the supervision of Senior Project Engineer Scott Fitinghoff, field engineers Dave Bishop and Eric Gonzales directed a subsurface exploration program and logged 11 borings (LA-1 through LA-11) to approximate depths of 25 to 30 feet. Well LA-5 was drilled in the anticipated down-gradient direction of the Arco Station (Figure 2). Soil samples were obtained from the borings at 2- to 5-foot-depth intervals or significant changes in lithology. Ground water was encountered at an approximate depth of 8½ to 16 feet. Boring logs and other documentation from the borings are presented in our geotechnical report for the project.

As part of the geotechnical investigation, 6 of the 11 borings were converted to permanent ground water monitoring wells to facilitate long-term ground water elevation measurements. Well installation details are presented in the geotechnical report. The well and boring locations are shown on Figure 2.

5.2 Field Screening

To screen soil quality, the soil samples were monitored for volatile hydrocarbons using an organic vapor meter (OVM). The OVM results revealed concentrations typical of natural background levels, with the highest readings at less than 10 parts per million (ppm). No visual or olfactory indications of impacted soil or ground water were observed in the soil samples collected from and ground water encountered in the borings.

5.3 Laboratory Analyses for Ground Water Samples

Due to the reported presence of gasoline-impacted soil and ground water reportedly present at the ARCO station located at the intersection of Middlefield Road and Matadero Creek, we collected and analyzed a ground water sample from the nearest down-gradient monitoring well from the ARCO station. We also collected and analyzed a ground water sample from the well near the intersection of the creek with Highway 101, since reportedly an active landfill is present nearby and an oil or other hazardous material release incidents have occurred in the vicinity.

On June 21, 1999, ground water samples were collected from monitoring wells LA-1 and LA-5, located adjacent to Matadero Creek, southwest of the Highway 101 intersection and downstream of the ARCO station (Figure 2). While sampling well LA-1, it appeared that the well had collapsed. On July 9, 1999, well LA-1 was reinstalled and a ground water grab sample was collected.

One ground water sample from each well, collected on June 21, 1999, was analyzed for petroleum hydrocarbons using a fuel fingerprint scan, and BTEX and MTBE (EPA Test Method 8015/8020). The sample from well LA-1 was additionally analyzed for halogenated volatile organic compounds (VOCs) (EPA Test Method 8010). The ground water grab sample collected from LA-1 on July 9, 1999, was analyzed for the same compounds. Analytical results are shown in Table 2; copies of the analytical results are included in Appendix D.

Table 2. Analytical Results of Selected Ground Water Samples
(concentrations in parts per billion)

Well/ Boring Number	Date	Fuel Fingerprint	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	VOCs
LA-1	6/21/99	Stoddard = 150* Mineral Spirits = 180	<0.5	<0.5	<0.5	1.9	<5.0	ND
LA-1	7/9/99	ND	<0.5	<0.5	<0.5	0.52	<5.0	ND
LA-5	6/21/99	ND	<0.5	<0.5	<0.5	<0.5	<5.0	NA

* Chromatographic pattern not typical of a fuel
< Indicates that the compound was not detected at or above the stated laboratory reporting limit
ND Indicates that compounds were not detected at or above the laboratory detection limit
NA Not Analyzed

6.0 CONCLUSIONS

6.1 Historical Summary

According to topographic maps from the early 1900s, portions of Matadero Creek were not present in their current location. By 1939, an aerial photograph showed the current configuration of the Matadero Creek channel.

The portion of the creek channel at Highway 101 was listed in the regulatory database report as having an unspecified release of oil or other hazardous material and an active landfill was reported in the site vicinity. No further information was available regarding these database listings.

Available information for vicinity sites revealed a service station located at 2995 Middlefield Road, near the intersection of Middlefield Road and Matadero Creek, had been present since at least 1972.

A PG&E switching station was observed on both sides of the creek at the Highway 101 intersection. No further information on hazardous materials usage at the station was available.

6.2 Soil and Ground Water Quality Screening

Based on the field observations and OVM readings, soil sampled from the 11 geotechnical borings drilled for the geotechnical portion of this investigation did not appear to be significantly impacted with volatile organic compounds such as petroleum hydrocarbons. Since no indication of significantly-impacted soil was present, soil samples were not submitted for laboratory analysis.

Laboratory analysis of the ground water sample collected from well LA-5 did not detect petroleum hydrocarbons, BTEX, or MTBE above laboratory detection limits. Laboratory analysis of the initial ground water sample collected from well LA-1 detected concentrations of mineral spirits (150 ppb), a stoddard solvent-range compound (180 ppb), and xylenes (1.9 ppb); VOCs were not detected. Laboratory analysis of the second ground water grab sample collected from LA-1 (during re-installation of the well) detected only xylenes at a concentration only slightly above the detection limit (0.52 ppb); no other compounds were detected. The source of the petroleum hydrocarbons detected in the ground water sample from LA-1 on June 21, 1999 is unknown. They possibly were caused by contamination during the geotechnical investigation or laboratory error. Regardless, it does not appear that significant contamination is present in the ground water at this location.

6.3 Potential Soil and Ground Water Concerns

Based on information reviewed under the scope of this assessment, previous gasoline releases at the ARCO station located at 2995 Middlefield Road reportedly have impacted soil and ground water adjacent to the Matadero Creek channel. A previous channel widening project appears to have been canceled due to the presence of impacted soil adjacent to the channel. It appears that the remediation activities at the ARCO station have reduced contamination in the soil and ground water adjacent to the creek channel. For a further degree of comfort prior to the creek channel expansion, three or four additional ground water and soil exploratory borings could be advanced in the area of the Arco station, adjacent to the creek. This work would help characterize the extent of contamination present, if any, and help evaluate the contaminant concentrations that may be encountered during construction. If during the expansion, impacted soil is encountered, the soil should be stockpiled separately and soil samples should be collected to evaluate disposal options.

Based on the information obtained during this study, no hazardous material incidents, other than the gasoline releases at the Arco station, have been reported in the site vicinity that would be likely to significantly impact the site.

Two high-voltage power lines encased in insulating oil are present along the north bank of the creek channel. According to a representative of the City of Palo Alto, Electrical Engineering program, leaks from these lines have not occurred and a leak alarm system is reportedly in place. For a further degree of comfort, hand-augered borings could be advanced adjacent to the power lines to help determine if contamination from the lines is present. The use of a drill rig to collect these samples is not recommended due to the electrical hazards.

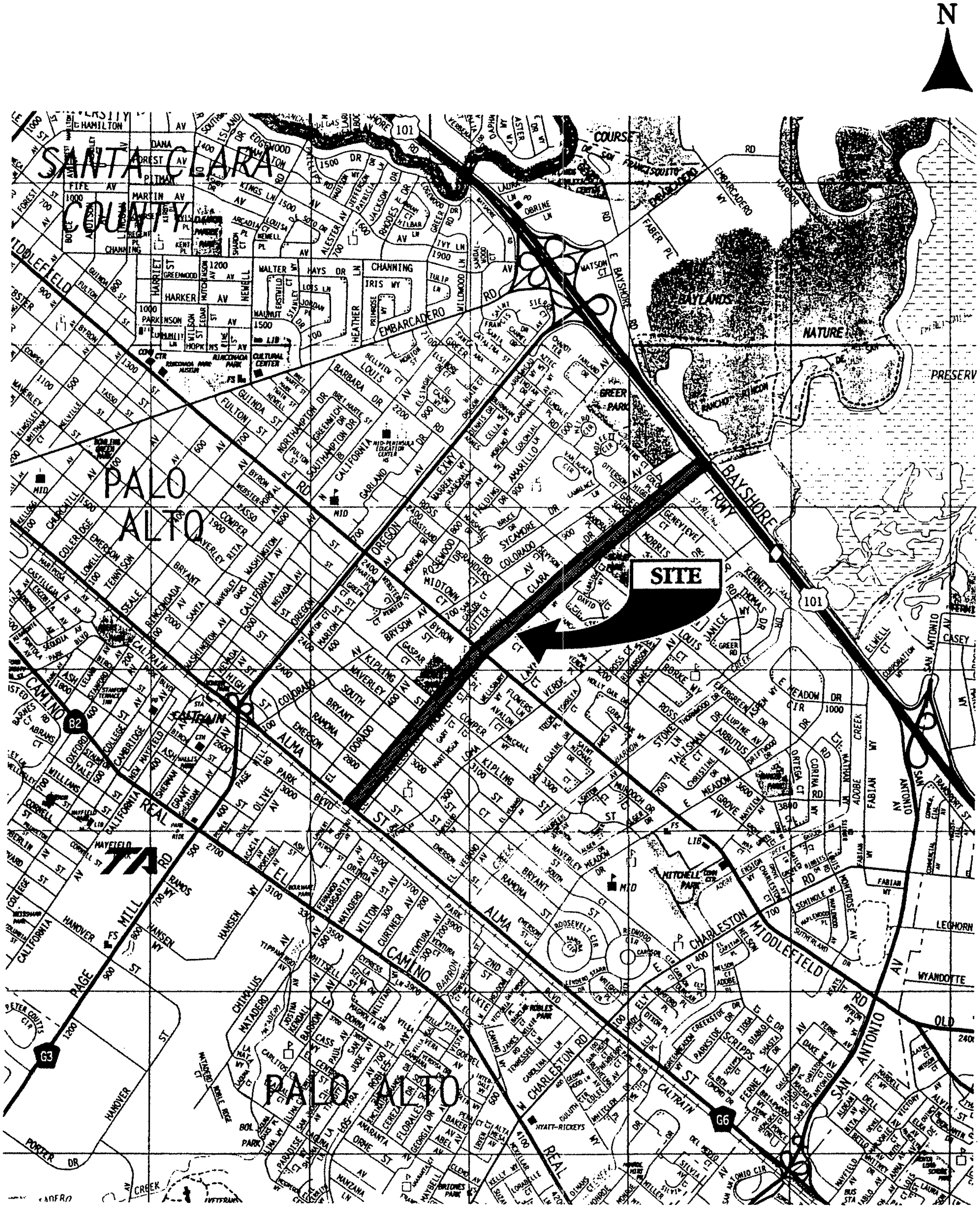
7.0 LIMITATIONS

As with all site assessments, the extent of information obtained is a function of client demands, time limitations, and budgetary constraints. Our conclusions and recommendations regarding the site are based on readily observable site conditions, review of readily available documents, maps, aerial photographs, and data collected and/or reported by others. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and location. The chemical and other data presented in this report can change over time and are applicable only to the time this study was performed. We are not responsible for the accuracy of information or data presented by others. Our conclusions and recommendations in this site assessment are qualified in that no soil or air analyses were performed. Sampling and analysis lead to a more reliable assessment of environmental conditions, conditions which often cannot be noted from typical Phase I activities. Should you desire a greater degree of confidence, these samples should be obtained and analyzed to further evaluate environmental conditions.

This report was prepared for the sole use of Schaaf & Wheeler and the SCVWD. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and location.

* * * * * * * * * * * * * *

Figures



"Reproduced with permission granted by THOMAS BROS. MAP"

6/99*EB

VICINITY MAP

MATADERO CREEK

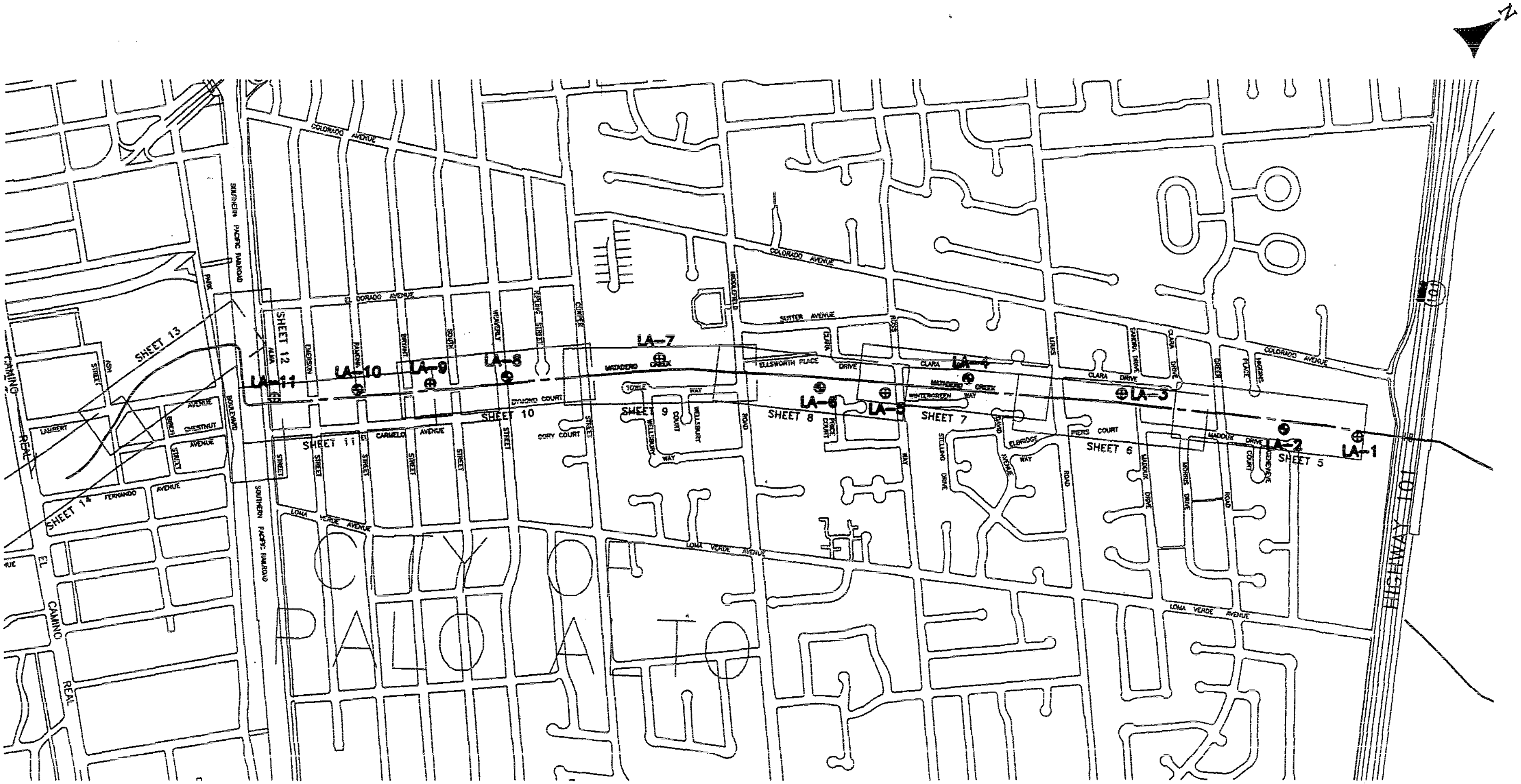
Palo Alto, California

LOWNEYASSOCIATES

Environmental/Geotechnical/Engineering Services

FIGURE 1

1453–1A



LEGEND

⊕ – Approximate location of exploratory boring

⊕ – Approximate location of monitoring well

0 700
Scale feet

Base by Santa Clara Valley Water District.

SITE PLAN
MATADERO CREEK
Palo Alto, California

LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 2

1453-1A

10/99 GSHCB

Appendix A

APPENDIX A

TERMS AND CONDITIONS

AGREEMENT FOR PROFESSIONAL SERVICES

Agreement entered into at Santa Clara, California made this 24th day of March 1999 by and between:

Consultant:	**Subconsultant:**
Schaaf & Wheeler, Consulting Civil Engineers	Lowney Associates
100 N. Winchester Blvd. Suite #200	405 Clyde Avenue
Santa Clara, CA 95050	Mountain View, CA 94043-2209
408/246-4848 ph.	650/967-2365 ph
408/246-5624 fax	650/967-2785 fax

1. Subconsultant agrees to perform the following services:

   Subconsultant shall perform the tasks identified in Attachment A - Scope of Services

2. Consultant agrees to compensate Subconsultant for such services as follows:

   Fee compensation shall be as identified in Attachment B - Compensation

3. Terms of Payment

   Upon Receipt from our Client and in proportion to work completed. The agreement between Client and Consultant includes a discretionary 10 percent retainage of Consultant's monthly invoice by Client. In such case, Consultant shall retain 10 percent of Subconsultant's invoice until such time as Client releases the retainage.

4. Terms and Conditions:

   a) During the performance of work covered by this agreement, the subconsultant shall maintain professional liability insurance in the amount of $1,000,000 each claim and $1,000,000 aggregate covering the subconsultant's acts, errors or omissions.

   b) Conditions set forth on the attached Standard Provisions dated February 1, 1999 are incorporated as part of this agreement.

In witness whereof, the parties hereto have accepted, made and executed this agreement upon the terms, conditions and provision above stated and on the attached hereof, the day and year first above written:

Consultant: SCHAAF & WHEELER	Subconsultant:
By: James R. Schaaf	By:
Name/Title: James R. Schaaf, President	Name/Title: Scott E. Fitinghoff Senior Project Engineer
Date: March 24 1999	Date: 3/9/99
Project No.:	Project No.: P8517

C:\KMO\WP\PROJECTS\MATADERO\CONTRACT\SUBAGRMT\LOWNEY.WPD

STANDARD PROVISIONS

February 1, 1999

1. GENERAL - Subconsultant is an independent contractor and all persons employed by Subconsultant in connection herewith shall be its employees and not employees of Consultant in any respect. Subconsultant shall comply with applicable local, State and Federal laws, rules and regulations and shall obtain all permits for the work to be performed hereunder.

2. TIME OF PERFORMANCE - Subconsultant shall complete all work within the time mutually agreed upon unless the time is extended by Consultant.

3. INDEMNITY - Subconsultant shall indemnify and hold harmless Consultant (including its officers, agents and employees) against all losses, damages, expenses (including attorney's fees), and liability for injury or harm to persons or property and its contents to the extent due to the subconsultant's negligent performance of this Agreement.

4. INSURANCE - During the performance of work covered by this Agreement, Subconsultant shall maintain the following insurance coverages:

COVERAGE	MINIMUM AMOUNTS AND LIMITS
a) Workers' Compensation	Statutory requirements at location of work
b) Employer's Liability	$1,000,000 policy limit
c) General Commercial Liability	$1,000,000 each occurrence; $2,000,000 aggregate
d) Automobile Bodily Injury and Property Damage including coverage for owned, non-owned and hired automobiles	$1,000,000 combined single limit each accident or occurrence
e) Professional Liability	See Paragraph 4a of Basic Agreement

Coverage including © shall include products and completed operations, and contractual liability.

Policies for © and (d) above shall include or be endorsed to include Consultant (including its officers and employees) as additional insureds and to stipulate that the insurance afforded for Consultant shall be primary insurance and that any insurance carried by Consultant shall be excess and not contributory insurance. Proof of insurance shall be mailed to our office upon request.

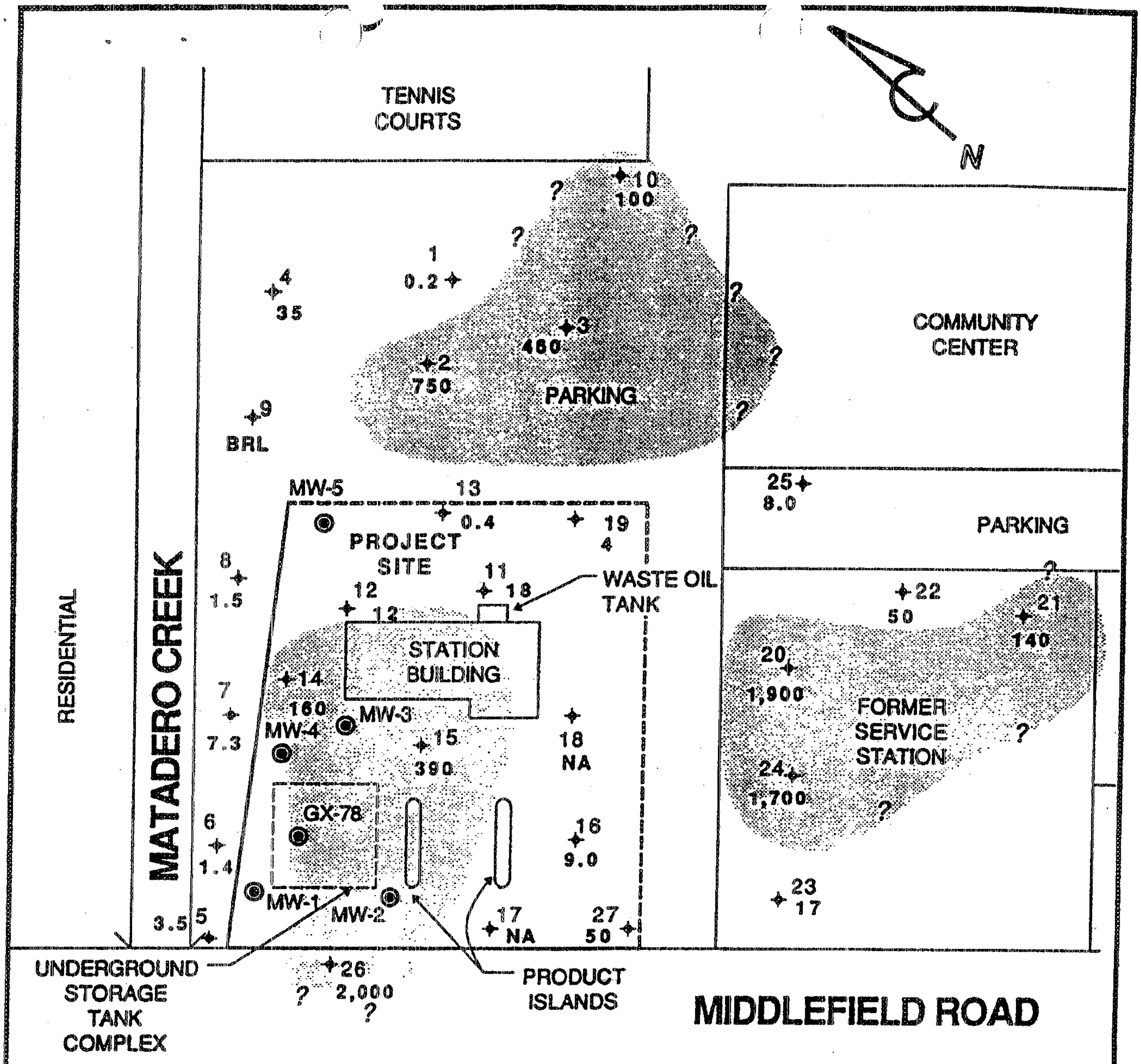
5. EQUAL EMPLOYMENT OPPORTUNITY - The Subconsultant shall not discriminate against any employee or applicant for employment because of race, religious creed, color, age, national origin, ancestry, physical handicap, medical condition, sex or marital status in accordance with Executive Order 11246 and Section 1735 of the Labor Code of the State of California. The Subconsultant shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their race, religious creed, color, age, national origin, ancestry, physical handicap, medical condition, sex or marital status.

Initials

Appendix B

APPENDIX B

SELECTED CITY DOCUMENTS



LEGEND

26 ✛ SOIL-GAS PROBE LOCATION AND DESIGNATION, 2-89

2,000 TOTAL BTEX CONCENTRATION OF SOIL-GAS IN PARTS PER MILLION (ppm) AT 6-8' DEPTH
BRL - BELOW REPORTING LIMIT (.1 ppm), 2-3-89 and 2-6-89
NA - NOT ANALYZED WITH GAS CHROMATOGRAPH

MW-1 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

▨ TOTAL BTEX CONCENTRATION OF SOIL-GAS GREATER THAN 100 ppm, 2-3-89 and 2-6-89

SCALE
0 50 100 FEET

PACIFIC ENVIRONMENTAL GROUP, INC.	ARCO SERVICE STATION #4430 2995 Middlefield Road Palo Alto, California	FIGURE: 5
	SOIL-GAS TOTAL BTEX CONCENTRATION MAP (2-89)	PROJECT: 330-38.04

PACIFIC
ENVIRONMENTAL
GROUP INC.

January 24, 1989
Project No. 330-38.01

ARCO Petroleum Products Company
2000 Alameda De Las Pulgas
San Mateo, California 94402

Attn: Mr. Kyle Christie

RE: ARCO Service Station #4430
2995 Middlefield Road
Palo Alto, California

red fuel file

Dear Mr. Christie:

This letter presents a work plan prepared by Pacific Environmental Group, Inc. (PACIFIC) to further define the extent of gasoline hydrocarbons in groundwater at the above referenced site (see Figures 1 and 2). This work plan includes a discussion of site background and a description of proposed investigative procedures.

BACKGROUND

Previous investigations have been conducted at the site by Geonomics Inc. and Kaprealian Engineering, Inc.. Geonomics documented the installation of one groundwater monitoring well (GX-78) in the former underground storage tank complex in a report dated October 2, 1986. Well GX-78 contained 0.11 foot of floating product during September 1986, therefore a groundwater sample was not taken as part of Geonomics investigation. Kaprealian documented the installation of five additional groundwater monitoring wells (MW-1 through MW-5) in a report dated February 25, 1987. Wells MW-1, MW-2 and MW-4 are located adjacent to the underground storage tank complex, and Wells MW-3 and MW-5 are located north (generally downgradient) of the tank complex and service islands.

The site was found to be underlain by interbedded clay, clayey gravel and silty clay to the total depth explored of 25 feet. Kaprealian documented static groundwater at approximately 8 to 9 feet below grade, with a groundwater flow direction to the northeast.

FPB 8A

City of Palo Alto
FIRE PREVENTION BUREAU
250 HAMILTON AVENUE PALO ALTO, CALIFORNIA 94301
(415) 329-2184

RECORD OF ADDITIONAL INFORMATION

file red-fuel

10/2

BUSINESS NAME: ARCO

IE NUMBER:

NUMBER: 2995 DIR: STREET & BUILDING: MIDDLEFIELD

BUSINESS PHONE:

TYPE:

CONTACT WITH Bob Muser - Santa Clara Valley Water District

TYPE INSP: F.04 DURATION: 0.73 INSPECTION DATE: 090688 INSPECTOR: 0110H

Bob Muser called FPB and reported gasoline oders coming from excavated soil. Jim Tinko and myself responded and met Mr Muser at Middlefield + Madadero Creek in front of the ARCO station. ≈5:20 pm

The SCVWD project consisted of ~~[illegible]~~ enlarging Matadero Creek. The concrete canal was partially broken away and excavator graders removed soil to widen the creek. Tuesday afternoon the grader operator reported a smell of gasoline in the soil being removed. One worker complained of dizziness at the end of the shift.

Approaching the excavation we could detect a faint smell of hydrocarbons. We walked down the rim of the canal to the excavation and the oder did not change much (slight westerly breeze). The base of the canal is approximately 10 feet below grade. We grabbed random samples of soil and smelled for product. The strongest

White copy: File Yellow copy: Inspector Pink copy: Data Processing Goldenrod copy: Contact

9/88

Flood control work halted by discovery of gas in soil

By Lisa Lapin
Mercury News Staff Writer

Workers digging into Matadero Creek in Palo Alto for a flood control project have uncovered an unexpected problem: soil saturated with gasoline.

The finding brought work on the creek bed — next to the Arco gas station at 2995 Middlefield Road — to a halt last week. And today, investigators will be trying to determine whether the area is safe for workers.

Workers who were excavating the site said the fumes were so strong they couldn't work. The fumes also alarmed several nearby residents who brought the matter to the attention of the city.

The Santa Clara Valley Water District, which is responsible for the flood control project, has detected gasoline levels as high as 3,600 parts per million in soil next to the Arco station. Soil with more than 1,000 parts per million of gasoline is considered a Class 1, or most serious, hazardous waste.

"Any leak is important to us, and we are taking this seriously," Palo Alto Fire Chief Bob Wall said.

Fire department records show that the station was cited in October 1987 for having a leaking gaso-

See LEAK, Page 4B

File – Arco

Subject: Gasoline leak
Sender: Ellen FLETCHER / CPA/CH   Contents: 2.
TO: Bob WALL / CPA/CH

Rw 9/8/88

Part 1.

TO: Bob WALL / CPA/CH

CC: Bill ZANER / CPA/CH

Part 2.

I've just heard that construction has been halted at Matadero Creek/ Middlefield Road because the soil is saturated with gasoline.

The person who called me lives on Ellsworth Place, which backs up to the Creek there. He wants to know if we can "get rid of the gas station" - he doesn't want it there.

Do you have info you can share?

Ellen.

9-16-88   11:15   Lisa Lapin Mercury News - 940-4454

discussed leak in general terms.

1. SCVWD tested soil 3700 ppm
2. Arco " " 1600 ppm (
3. worker safety? SCVWD will bring in [illegible].
4. New or old leak? Rw ans. old leak.
5. I plan to organize a neighborhood meeting next week.

PACIFIC
ENVIRONMENTAL
GROUP, INC.

August 12, 1991
Project 330-03.05

Mr. Kyle Christie
ARCO Products Company
P. O. Box 5811
San Mateo, California

Re: Monthly Status Letter
ARCO Service Station 4430
2995 Middlefield Road at Matadero Creek Recd
Palo Alto, California

Dear Mr. Christie:

This letter provides an update on activities for the site referenced above. This update reports site activities performed during the month of July 1991 and site activities anticipated for the month of August 1991.

STATUS OF JULY 1991 ACTIVITIES:

- o Continue monthly monitoring of wells to check for separate-phase hydrocarbons.
- o Issued addendum to 5/28/91 site assessment report on 7/3/91 showing extraction well locations and estimated capture radius.
- o Initiated encroachment and permitting from the City of Palo Alto to install a groundwater extraction well.
- o Continued design of groundwater treatment system.

ANTICIPATED WORK TO BE PERFORMED IN AUGUST 1991:

- o Complete design and initiate permitting of the groundwater treatment system.
- o Install two groundwater extraction wells.

1601 Civic Center Drive, Suite 202, Santa Clara, California 95050 (408) 984-6536 FAX: (408) 243-3911
620 Contra Costa Boulevard, Suite 209, Pleasant Hill, California 94523 (415) 825-0855 FAX: (415) 825-0882

- Issue quarterly groundwater monitoring results.

Please call if you have any questions concerning this letter.

Sincerely,

Pacific Environmental Group, Inc.

Brian Frus
Staff Engineer

Tina Berry

Tina Berry
Senior Staff Geologist

cc: Chris Winsor, ARCO Products Company
David D. Drury, Santa Clara Valley Water District
Penny Silzer, RWQCB - S.F. Bay Region
Jim Timko, Palo Alto Fire Department

Pinnacle
IRONMENTAL SOLUTIONS

a division of
EMCON

June 1, 1999
Project 20805-232.002

Mr. Paul Supple
ARCO Products Company
PO Box 6549
Moraga, California 94570

Re: Quarterly Groundwater Monitoring Report, First Quarter 1999, for ARCO Service Station No. 4430, located at 2995 Middlefield Road, Palo Alto, California

Dear Mr. Supple:

Pinnacle Environmental Solutions, a division of EMCON (Pinnacle), is submitting the attached report which presents the results of the first quarter 1999 groundwater monitoring program at ARCO Products Company (ARCO) Service Station No. 4430, located at 2995 Middlefield Road, Palo Alto, California. The monitoring program complies with the Santa Clara Valley Water District (SCVWD) requirements regarding underground tank investigations.

LIMITATIONS

No monitoring event is thorough enough to describe all geologic and hydrogeologic conditions of interest at a given site. If conditions have not been identified during the monitoring event, results should not be construed as a guarantee of the absence of such conditions at the site, but rather as the product of the scope and limitations of work performed during the monitoring event.

Please call if you have questions.

Sincerely,

Pinnacle

for Glen VanderVeen
Project Manager

Jay R. Johnson, R.G.
Senior Project Supervisor

Attachment: Quarterly Groundwater Monitoring Report, First Quarter 1999

cc: Ms. Cris Tulloch, Santa Clara Valley Water District
Mr. John West, Regional Water Quality Control Board - S.F. Bay Region

OAK\S:\ARCO\4430\QTRLY\4430Q199.DOC\uh:1

Date: June 1, 1999

ARCO QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.: 4430 Address: 2995 Middlefield Road, Palo Alto, California
ARCO Environmental Engineer: Paul Supple
Consulting Co./Contact Person: Pinnacle Environmental Solutions/ Glen VanderVeen
Consultant Project No.: 20805-232.002
Primary Agency/Regulatory ID No.: Santa Clara Valley Water District

WORK PERFORMED THIS QUARTER (FIRST - 1999):

1. Prepared and submitted quarterly groundwater monitoring report for fourth quarter 1998.
2. Performed quarterly groundwater monitoring and sampling for first quarter 1999.

WORK PROPOSED FOR NEXT QUARTER (SECOND - 1999):

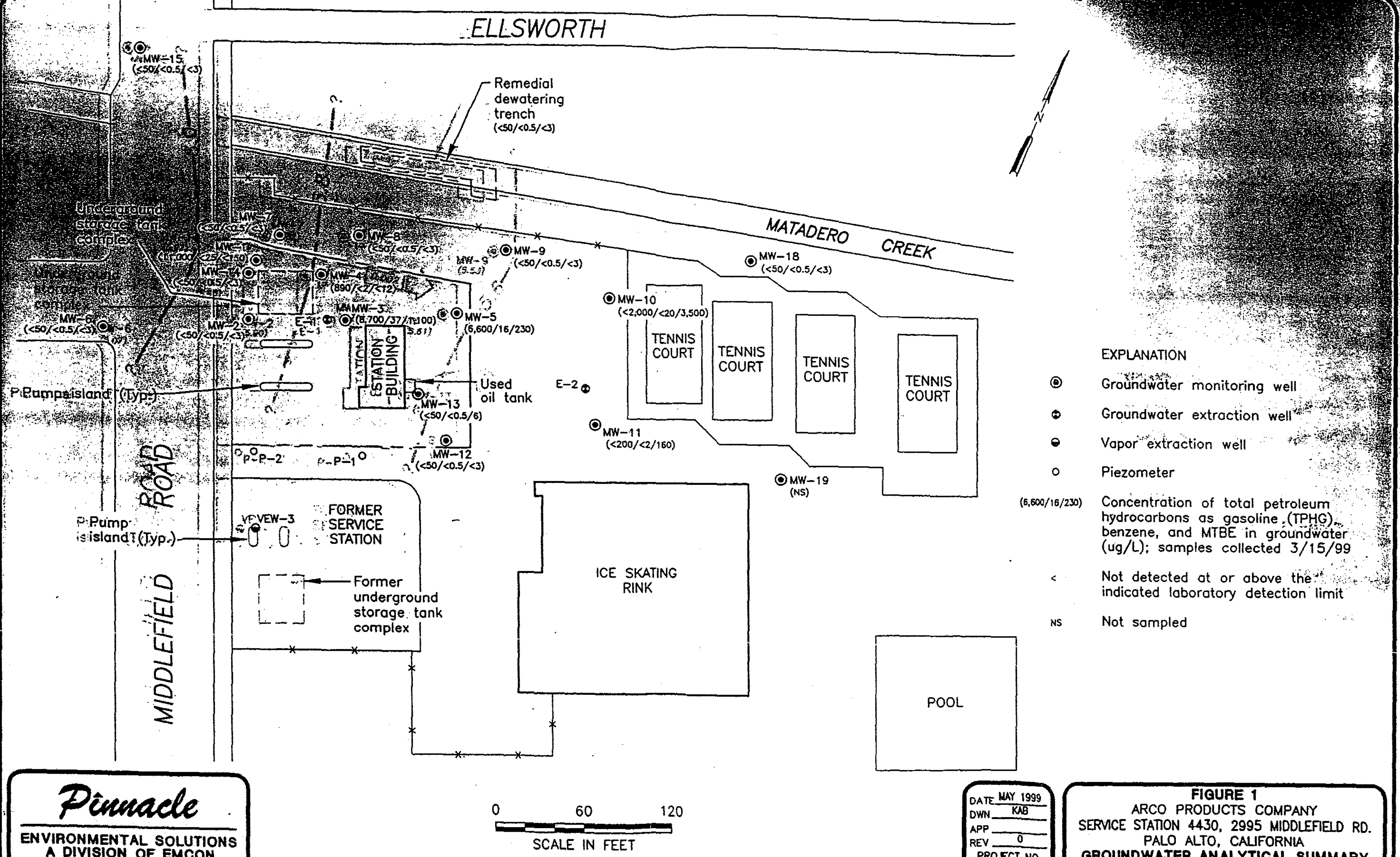
1. Prepare and submit quarterly groundwater monitoring report for first quarter 1999.
2. Perform quarterly groundwater monitoring and sampling for second quarter 1999.
3. Upgrade product dispenser.

QUARTERLY MONITORING:

Current Phase of Project: Monitoring
Frequency of Groundwater Sampling: Annual (1st Quarter): MW-1 through MW-5, MW-13, MW-14
Quarterly: MW-6 through MW-12, MW-15, MW-18, MW-19, Trench
Frequency of Groundwater Monitoring: Quarterly
Is Free Product (FP) Present On-Site: No
FP Recovered this Quarter: None
Cumulative FP Recovered to Date: None
Bulk Soil Removed This Quarter: None
Bulk Soil Removed to Date: Unknown
Current Remediation Techniques: Natural Attenuation
Depth to Groundwater Range: 8.2 feet
Groundwater Flow Direction and Gradient (Average): 0.002 ft/ft toward East
Period TPPH-g/Benzene Removed: 0.0/0.0
Cumulative TPPH-g/Benzene Removed: 6.1/0.14 gallons

DISCUSSION:

- Groundwater remediation system was shut down in September 1995. Plume appears stable.
- Intrinsic bioremediation evaluation (3rd Quarter 1996) indicated that natural biodegredation processes are occurring.
- Please refer to the Fourth Quarter 1996 Groundwater Monitoring Report for historical groundwater elevation and analytical data.

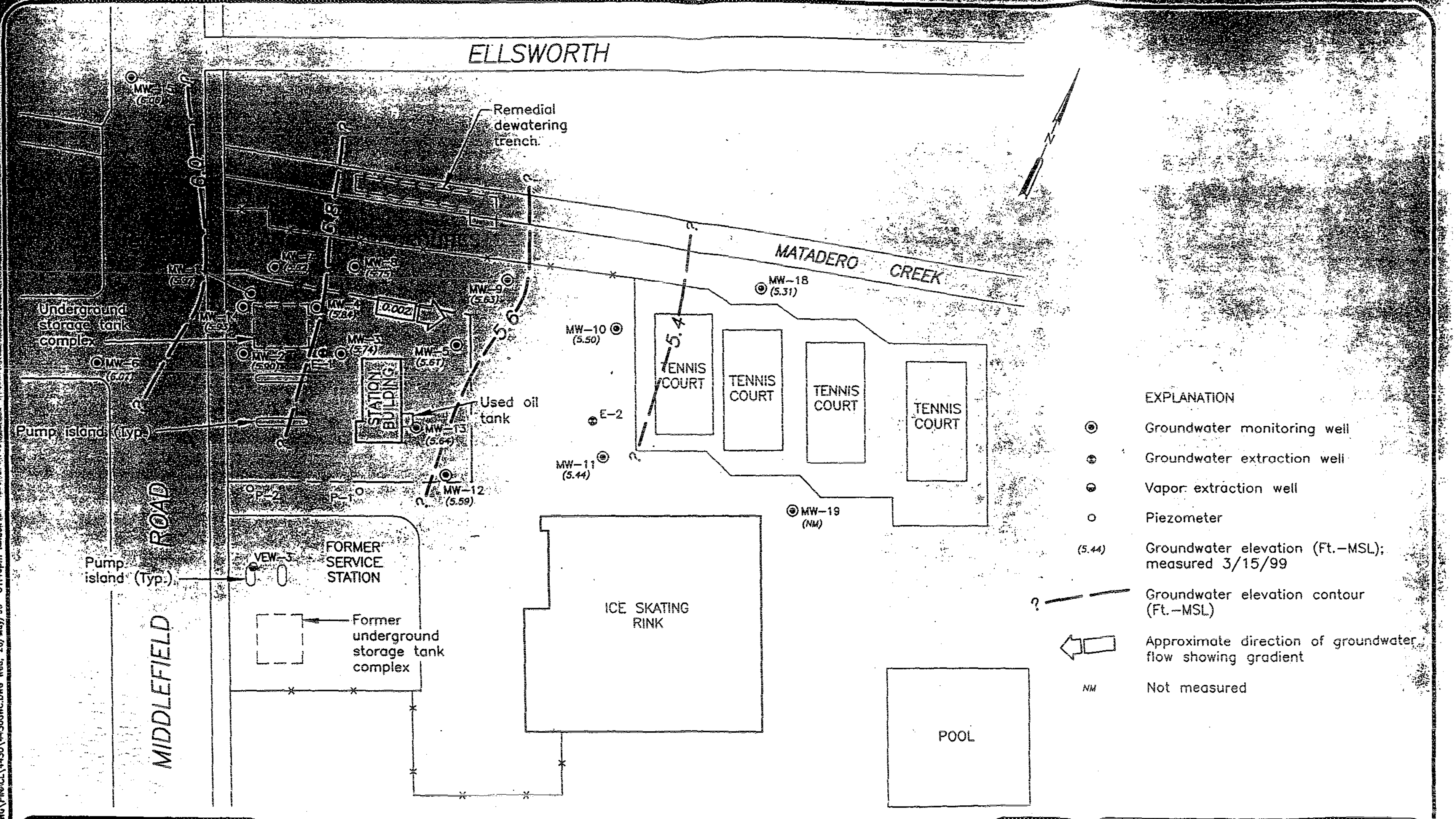


Pinnacle
ENVIRONMENTAL SOLUTIONS
A DIVISION OF EMCON

DATE MAY 1999
DWN KAB
APP
REV 0
PROJECT NO. 20805-232.002

FIGURE 1
ARCO PRODUCTS COMPANY
SERVICE STATION 4430, 2995 MIDDLEFIELD RD.
PALO ALTO, CALIFORNIA
GROUNDWATER ANALYTICAL SUMMARY
FIRST QUARTER 1999

IMAGE Files: <No Images>
XREF Files: <No Xrefs>
Dimscale: 60 Ltscale: 60 Pltscale: 1
SANJOSE/CADD: N:\DWG\PINACL\4430\4430CHEM.DWG Wed, 26/May/99 01:44pm kblack



1" 1/2" 0" 1"

Dimscale: 60 Ltscale: 60 Psltscale: 1
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IMAGE Files: <No Images>
XREF Files: <No Xrefs>

Pinnacle
ENVIRONMENTAL SOLUTIONS
A DIVISION OF EMCON

DATE MAY 1999
DWN KAB
APP
REV 0
PROJECT NO.
20805-232.002

FIGURE 2
ARCO PRODUCTS COMPANY
SERVICE STATION 4430, 2995 MIDDLEFIELD RD.
PALO ALTO, CALIFORNIA
GROUNDWATER ELEVATION CONTOURS
FIRST QUARTER 1999

Appendix C

APPENDIX C

REGULATORY AGENCY DATABASE REPORT

The EDR-Radius Map™ Report

Matadero Creek
Alma St + 101
Palo Alto, CA 94303

Inquiry Number: 0361233.1r

April 21, 1999

EDR® Environmental Data Resources, Inc.
an edr™ company

***The* Source For Environmental Risk Management Data**

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Topographic Map 2

GeoCheck Summary - Not Requested

Overview Map 3

Detail Map 4

Map Summary - All Sites 5

Map Summary - Sites with higher or the same elevation as the Target Property 6

Map Findings 7

Orphan Summary 328

APPENDICES

GeoCheck Version 2.1 - Not Requested

EPA Waste Codes A1

Government Records Searched / Data Currency Tracking Addendum A4

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer and Other Information

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-97. Search distances are per ASTM standard or custom distances requested by the user.

The address of the subject property for which the search was intended is:

ALMA ST + 101
PALO ALTO, CA 94303

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the subject property or within the ASTM E 1527-97 search radius around the subject property for the following Databases:

NPL:	National Priority List
Delisted NPL:	NPL Deletions
AWP:	AWP
Toxic Pits:	Toxic Pits
CERC-NFRAP:	Comprehensive Environmental Response, Compensation, and Liability Information System
AST:	Aboveground Petroleum Storage Tank Facilities
RAATS:	RCRA Administrative Action Tracking System
WMUDS:	WMUDS/SWAT
HMIRS:	Hazardous Materials Information Reporting System
PADS:	PCB Activity Database System
TRIS:	Toxic Chemical Release Inventory System
TSCA:	Toxic Substances Control Act
MLTS:	Material Licensing Tracking System
NPL Lien:	NPL Liens
ROD:	ROD
CONSENT:	Superfund (CERCLA) Consent Decrees
Ca. WDS:	CA WDS
Coal Gas:	Former Manufactured gas (Coal Gas) Sites.

Unmapped (orphan) sites are not considered in the foregoing analysis.

Search Results:

Search results for the subject property and the search radius, are listed below:

Subject Property:

The subject property was identified in the following government records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
MATADERO CREEK AT SR 101 MATADERO CREEK AT SR 101 PALO ALTO, CA 94301	ERNS	N/A

Surrounding Properties:

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the subject property includes a tolerance of -10 feet. Sites with an elevation equal to or higher than the subject property have been differentiated below from sites with an elevation lower than the subject property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-TSD list, as provided by EDR, and dated 01/04/1999 has revealed that there are 2 RCRIS-TSD sites within approximately 1.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
COMMUNICATIONS AND POWER IND I	***607 HANSEN WY***	***1 - 2***	***SW***	***AO164***	***183***

Lower Elevation	Address	Dist / Dir		Map ID	Page
FORD AEROSPACE CORP	***3825 FABIAN WAY***	***1 - 2***	***ESE***	***189***	***237***

CAL-SITES: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control.

A review of the Cal-Sites list, as provided by EDR, has revealed that there are 8 Cal-Sites sites within approximately 1.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
OREGON EXPWY UNDERPASS	***OREGON EXPWY & ALMA ST***	***1/2 - 1***	***WSW***	***104***	***102***
DURA-BOND BEARING COMPANY	***395 PORTAGE***	***1 - 2***	***SW***	***AK151***	***157***
VARIAN ASSOCIATES HANSEN WAY	***611 HANSEN WAY (MAIL ST***	***1 - 2***	***SW***	***AO166***	***186***
FORD AEROSPACE & COMMUNICATION	3939 FABIAN WAY	1 - 2	ESE	193	245
ADVALLOY CORPORATION	844 E CHARLESTON RD	1 - 2	ESE	AX209	283
ALZA CORPORATION	***1454 PAGE MILL ROAD***	***1 - 2***	***SW***	***BA225***	***312***

Lower Elevation	Address	Dist / Dir		Map ID	Page
FORD AEROSPACE CORP	***1085 E MEADOW CIR***	***1/2 - 1***	***ESE***	***AH138***	***138***
FORD AEROSPACE CORP	***3825 FABIAN WAY***	***1 - 2***	***ESE***	***189***	***237***

NOTIFY 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, has revealed that there are 2 Notify 65 sites within approximately 1.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
HEWLETT-PACKARD	395 PAGE MILL RD.	1 - 2	WSW	163	183

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
JONES & BRIDGES, INC.	812 SAN ANTONIO ROAD	1 - 2 ESE	207	277

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/1994 has revealed that there are 17 CHMIRS sites within approximately 1.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
Not reported	2898 SOUTH COURT	1/4 - 1/2 SW	33	30
Not reported	LAMBERT/ASH	1/2 - 1 SW	AC132	136
Not reported	395 OLIVE ST.	1/2 - 1 SW	AG135	137
Not reported	2711 EL CAMINO REAL	1 - 2 WSW	AS181	221
Not reported	925 PAGEMILL ROAD PALO	1 - 2 SW	AW204	270
Not reported	925 PAGE MILL ROAD	1 - 2 SW	AW205	270
Not reported	961 E. CHARLESTON AVE	1 - 2 ESE	AX211	286
Not reported	743 CEREZA	1 - 2 S	213	290
Not reported	***777 SAN ANTONIO RD.***	***1 - 2 SE***	***AZ221***	***306***
Not reported	1450 PAGE MILL RD.	1 - 2 SW	BA224	312
Not reported	771 SERRA ST.	1 - 2 W	229	327

Lower Elevation	Address	Dist / Dir	Map ID	Page
Not reported	S/B US 101 NORTH OF EMB	1 - 2 N	179	217
Not reported	1571 DANA	1 - 2 NNW	197	256
Not reported	4019 TRANSPORT	1 - 2 ESE	AV203	269
Not reported	700 BLOCK NEWELL ROAD /	1 - 2 NNW	215	293
Not reported	855 COMMERCIAL ST.	1 - 2 ESE	218	302
Not reported	2425 EMBARCADERO WAY	1 - 2 NNE	AY219	303

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, has revealed that there are 41 Cortese sites within approximately 1.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ARCO	***2995 MIDDLEFIELD RD***	***0 - 1/8 S***	***A7***	***8***
PINN BROTHERS CONSTRUCTION INC	***759 LOMA VERDE AVE***	***1/4 - 1/2 ESE***	***E23***	***20***
HOHBACK	***216 PAGE MILL RD***	***1/2 - 1 WSW***	***V93***	***89***
CHEVRON	***3401 ALMA ST***	***1/2 - 1 S***	***W95***	***92***
DURA BOND BEARING COMPANY	***3201 ASH ST***	***1/2 - 1 SW***	***AC119***	***122***
HEWLETT PACKARD MFG DIV	***395 PAGE MILL RD***	***1 - 2 WSW***	***AL150***	***153***
COMBES AUTO REPAIR	***3585 EL CAMINO REAL***	***1 - 2 SSW***	***AN160***	***174***
SHELL	***3601 EL CAMINO REAL***	***1 - 2 SSW***	***AN161***	***178***
VARIAN ASSOCIATES HANSEN WAY	***611 HANSEN WAY (MAIL ST***	***1 - 2 SW***	***AO166***	***186***
PALO ALTO TIRE	***306 CAMBRIDGE AVE***	***1 - 2 WSW***	***168***	***189***
STANFORD CLEANERS	***2875 EL CAMINO***	***1 - 2 SW***	***172***	***198***

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
CO OPT GAS	*3897 EL CAMINO REAL*	*1 - 2*	*SSW*	*AQ174*	*206*
BP MOBIL	*2780 EL CAMINO REAL*	*1 - 2*	*SW*	*AS178*	*214*
GREEN WORLD NURSERY	*2711 EL CAMINO REAL*	*1 - 2*	*WSW*	*AS180*	*217*
CHEVRON	*3972 EL CAMINO REAL*	*1 - 2*	*S*	*AT185*	*227*
BEACON STATION #463	*4073 EL CAMINO REAL*	*1 - 2*	*S*	*AU186*	*230*
SHELL	*3900 MIDDLEFIELD RD*	*1 - 2*	*SE*	*188*	*233*
SHELL	*2200 EL CAMINO REAL*	*1 - 2*	*WSW*	*191*	*241*
MICROFAB SYSTEMS CORP	*3960 FABIAN WY*	*1 - 2*	*ESE*	*195*	*248*
ARCO	*1963 EL CAMINO REAL*	*1 - 2*	*WSW*	*196*	*253*
FILL EM FAST	*1795 EL CAMINO REAL*	*1 - 2*	*W*	*199*	*258*
SHELL OIL CO	*811 CHARLESTON*	*1 - 2*	*ESE*	*200*	*261*
EASTMAN KODAK COMPANY	*925 PAGE MILL RD*	*1 - 2*	*SW*	*AW206*	*270*
ADVALLOY INC	*844 E CHARLESTON*	*1 - 2*	*ESE*	*AX208*	*277*
ARCO	*840 SAN ANTONIO RD*	*1 - 2*	*ESE*	*AX212*	*287*
HYATT RICKEYS	*4201-4219 EL CAMINO REA*	*1 - 2*	*S*	*216*	*294*
ULTRAMAR BEACON	*780 SAN ANTONIO RD*	*1 - 2*	*SE*	*AZ220*	*303*
WEST BAY CYCLES	*750 SAN ANTONIO RD*	*1 - 2*	*SE*	*223*	*309*
ALZA CORPORATION	*1454 PAGE MILL ROAD*	*1 - 2*	*SW*	*BA225*	*312*
SHERMAN'S AUTO	*710 SAN ANTONIO RD*	*1 - 2*	*SE*	*BB226*	*314*
MOBIL SERVICE STATION	*4201 MIDDLEFIELD ROAD*	*1 - 2*	*SE*	*BB227*	*317*
TOYOTA OF PALO ALTO	*690 SAN ANTONIO RD*	*1 - 2*	*SE*	*BB228*	*322*

Lower Elevation	Address	Dist / Dir		Map ID	Page
MEGHER PROPERTY	*3070 LOUIS RD*	*1/4 - 1/2*	*NE*	*F30*	*27*
SHELL OIL CO	*1161 EMBARCADERO*	*1/2 - 1*	*N*	*AJ146*	*149*
OLD POST OFFICE	*2197 E BAYSHORE RD*	*1 - 2*	*N*	*194*	*246*
VICKERS CONCRETE	*4083 TRANSPORT ST*	*1 - 2*	*ESE*	*201*	*264*
WHEATLEY ASSOCIATES WHSE	*890 SAN ANTONIO RD.*	*1 - 2*	*ESE*	*AV202*	*266*
GARCIA DRILLING	*2642 BAYSHORE FWY*	*1 - 2*	*ESE*	*210*	*283*
PACIFIC BELL	*2750 MARINE WAY*	*1 - 2*	*E*	*214*	*290*
GO POWER	*1890 EMBARCADERO RD*	*1 - 2*	*NNE*	*AY217*	*301*
PALO ALTO AIRPORT	*1901 EMBARCADERO RD*	*1 - 2*	*NNE*	*222*	*306*

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 11/10/1998 has revealed that there is 1 CERCLIS site within approximately 1.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
HEWLETT-PACKARD (620-640 PAGE	*620 - 640 PAGE MILL RD.*	*1 - 2*	*SW*	*AS183*	*222*

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 12/01/1998 has revealed that there are 4 CORRACTS sites within approximately 1.75 miles of the subject property.

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
HEWLETT PACKARD MFG DIV	***395 PAGE MILL RD***	***1 - 2 WSW***	***AL150***	***153***
INTEVAC	***601 CALIFORNIA AVE***	***1 - 2 WSW***	***192***	***244***
VARIAN ASSOCIATES INC	***3120 HANSEN WY***	***1 - 2 SW***	***198***	***256***

Lower Elevation	Address	Dist / Dir	Map ID	Page
FORD AEROSPACE CORP	***3825 FABIAN WAY***	***1 - 2 ESE***	***189***	***237***

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there are 2 SWF/LF sites within approximately 1.25 miles of the subject property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
OLD PIERS DAIRY	***3065 LOUIS RD***	***1/4 - 1/2 NE***	***F26***	***23***
CITY OF PALO ALTO REFUSE DISPO	3201 E BAYSHORE RD	1/2 - 1 NE	U79	68

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 01/31/1999 has revealed that there are 56 LUST sites within approximately 1.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ARCO #4430	2995 MIDDLEFIELD RD	0 - 1/8 S	A5	7
ARCO	***2995 MIDDLEFIELD RD***	***0 - 1/8 S***	***A7***	***8***
SHELL	***3011 MIDDLEFIELD RD***	***0 - 1/8 S***	***A8***	***11***
PINN BROTHERS CONSTRUCTION CO.	759 LOMA VERDE AVE	1/4 - 1/2 ESE	E22	20
PINN BROTHERS CONSTRUCTION INC	***759 LOMA VERDE AVE***	***1/4 - 1/2 ESE***	***E23***	***20***
SNELL RESIDENCE	***2388 WAVERLEY ST***	***1/2 - 1 W***	***I42***	***33***
MCOMBER RESIDENCE	2175 COWPER ST	1/2 - 1 WNW	K45	37
MCOMBER PROPERTY	***2175 COWPER ST***	***1/2 - 1 WNW***	***K46***	***37***
SHELL	299 CALIFORNIA AVE	1/2 - 1 W	54	44
VANCE BROWN & SONS	***3101 PARK BLVD***	***1/2 - 1 SW***	***M57***	***46***
SABIN RESIDENCE	***491 SANTA RITA AVE***	***1/2 - 1 WNW***	***63***	***50***
HOHBACK	200 PAGE MILL RD	1/2 - 1 WSW	V83	77
VANCE BROWN & SONS	***2747 PARK BLVD***	***1/2 - 1 WSW***	***V88***	***79***
HOHBACK	***216 PAGE MILL RD***	***1/2 - 1 WSW***	***V93***	***89***
CHEVRON	***3401 ALMA ST***	***1/2 - 1 S***	***W95***	***92***
CHEVRON #9-6791	3401 ALMA ST	1/2 - 1 S	W98	96
FLETCHER PROPERTY	***2020 WAVERLEY ST***	***1/2 - 1 WNW***	***AB110***	***111***
FLETCHER RESIDENCE	2020 WAVERLEY ST	1/2 - 1 WNW	AB112	114
DURA BOND BEARING COMPANY	***3201 ASH ST***	***1/2 - 1 SW***	***AC119***	***122***
DURA-BOND	***3201 ASH ST***	***1/2 - 1 SW***	***AC120***	***125***
JOST HEATING & SHEET METAL INC	***412 OLIVE AVE***	***1/2 - 1 SW***	***AG139***	***141***
HEWLETT PACKARD MFG DIV	***395 PAGE MILL RD***	***1 - 2 WSW***	***AL150***	***153***
COMSTOCK PROPERTY	***595 TENNYSON AVE***	***1 - 2 WNW***	***152***	***160***
BLEIBLER IRON WORKS	411 PAGE MILL RD	1 - 2 WSW	AL153	163
BLEIBER IRON WORKS	***411 PAGE MILL RD***	***1 - 2 WSW***	***AL154***	***165***

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
OLD FIRE STATION	***2253 PARK BLVD***	***1 - 2 W***	***155***	***168***
PALO ALTO FIRESTONE	***3401 EL CAMINO REAL***	***1 - 2 SSW***	***AM156***	***171***
PALO ALTO FIRESTONE	3401 EL CAMINO REAL	1 - 2 SSW	AM157	172
JOHNS AUTOMOTIVE	3508 EL CAMINO REAL	1 - 2 SSW	AN158	173
JOHN'S AUTOMOTIVE	3508 EL CAMINO REAL	1 - 2 SSW	AN159	174
COMBES AUTO REPAIR	***3585 EL CAMINO REAL***	***1 - 2 SSW***	***AN160***	***174***
SHELL	***3601 EL CAMINO REAL***	***1 - 2 SSW***	***AN161***	***178***
CARMEAN TRUST	***411 ACACIA AVE***	***1 - 2 SW***	***165***	***183***
PALO ALTO TIRE	***306 CAMBRIDGE AVE***	***1 - 2 WSW***	***168***	***189***
PALO ALTO NISSAN	***3001 EL CAMINO REAL***	***1 - 2 SW***	***169***	***192***
RIGGS RESIDENCE	634 LOWELL AVE	1 - 2 WNW	AP170	195
RIGGS PROPERTY	***634 LOWELL AVE***	***1 - 2 WNW***	***AP171***	***195***
STANFORD CLEANERS	***2875 EL CAMINO***	***1 - 2 SW***	***172***	***198***
CO-OPT SERVICE STATION	3897 EL CAMINO REAL	1 - 2 SSW	AQ173	206
CO OPT GAS	***3897 EL CAMINO REAL***	***1 - 2 SSW***	***AQ174***	***206***
BARON PROPERTY	***521 LOWELL AVE***	***1 - 2 WNW***	***AR175***	***209***
BARON RESIDENCE	521 LOWELL AVE	1 - 2 WNW	AR176	212
MOBIL SERVICE STATION	***2780 EL CAMINO REAL***	***1 - 2 SW***	***AS177***	***212***
GREEN WORLD NURSERY	***2711 EL CAMINO REAL***	***1 - 2 WSW***	***AS180***	***217***
CHEVRON #9-3173	3972 EL CAMINO REAL	1 - 2 S	AT184	227
CHEVRON	***3972 EL CAMINO REAL***	***1 - 2 S***	***AT185***	***227***
BEACON STATION #463	***4073 EL CAMINO REAL***	***1 - 2 S***	***AU186***	***230***
BEACON #463	4073 EL CAMINO REAL	1 - 2 S	AU187	233
SHELL	***3900 MIDDLEFIELD RD***	***1 - 2 SE***	***188***	***233***
ROYAL GLASS & MIRROR	***450 CAMBRIDGE AVE***	***1 - 2 WSW***	***190***	***238***

Lower Elevation	Address	Dist / Dir	Map ID	Page
OLD PIERS DAIRY	***3065 LOUIS RD***	***1/4 - 1/2 NE***	***F26***	***23***
CHABAD OF THE GREATER SOUTH B	3070 LOUIS RD	1/4 - 1/2 E	H34	30
CHABAD OF THE GREATER S BAY	3070 LOUIS RD	1/4 - 1/2 E	H35	31
GUS MOZART PROPERTY	1068 E MEADOW CIR	1/2 - 1 E	Z106	106
MOZART PROPERTY	***1068 E MEADOW CIR***	***1/2 - 1 E***	***Z107***	***106***
SHELL OIL CO	***1161 EMBARCADERO***	***1/2 - 1 N***	***AJ146***	***149***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 16 UST sites within approximately 1 mile of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
D M ORTIZ	2995 MIDDLEFIELD RD	0 - 1/8 S	A6	7
DAN RAYMANN (OWNER OF REAL PRO	2520 MIDDLEFIELD ROAD	1/4 - 1/2 WNW	G31	29
ZZONTA	2680 RAMONA	1/2 - 1 WSW	J40	33
PARK AVENUE MOTORS	***3290 PARK BLVD***	***1/2 - 1 SW***	***L50***	***42***
PACIFIC BELL	***3350 BIRCH STREET***	***1/2 - 1 SW***	***S73***	***59***
PACIFIC READY MIX INC	2785 PARK BLVD	1/2 - 1 WSW	V84	77
OFFICES OF VANCE M. BROWN & SO	2747 PARK BOULEVARD	1/2 - 1 WSW	V87	79
FIRE STATION #4	3600 MIDDLEFIELD	1/2 - 1 SE	O91	86
96791	3401 ALMA ST	1/2 - 1 S	W96	95
STAR GRAPHIC ARTS CO. INC.	3200 ASH ST.	1/2 - 1 SW	AC121	128

Lower Elevation	Address	Dist / Dir	Map ID	Page
PIERS DAIRY	3070 LOVIS ROAD	1/4 - 1/2 NE	D20	19

Lower Elevation	Address	Dist / Dir	Map ID	Page
PIERS DAIRY	3065 LOVIS ROAD	1/4 - 1/2 NE	D21	19
INTERNATIONAL POWER TECHNOLOGY	2800 WEST BAYSHORE RD	1/2 - 1 NE	N59	49
MUNICIPAL SERVICE CENTER	3201 E. BAYSHORE ROAD	1/2 - 1 NE	U78	65
PALO ALTO PLACE	3350 WEST BAYSHORE	1/2 - 1 ENE	94	91
EMBARCADERO SHELL	1161 EMBARCADERO RD	1/2 - 1 N	AJ144	148

CA FID: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the Ca. FID list, as provided by EDR, has revealed that there are 16 Ca. FID sites within approximately 1 mile of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ARCO FAC #4430	2995 MIDDLEFIELD RD	0 - 1/8 S	A3	7
ZOHRAB'S ARCO GARAGE	3233 MIDDLEFIELD RD	1/4 - 1/2 SE	24	23
QUIK STOP MARKET #59	3401 MIDDLEFIELD RD	1/2 - 1 SE	38	32
ZZONTA	2680 RAMONA	1/2 - 1 WSW	J41	33
PARK AVENUE MOTORS	***3290 PARK BLVD***	***1/2 - 1 SW***	***L50***	***42***
FIRE STATION #4	3600 MIDDLEFIELD	1/2 - 1 SE	58	49
PACIFIC BELL	***3350 BIRCH STREET***	***1/2 - 1 SW***	***S73***	***59***
PACIFIC READY MIX INC	2785 PARK BLVD	1/2 - 1 WSW	V86	79
OFFICES OF VANCE M. BROWN & SO	2747 PARK BLVD	1/2 - 1 WSW	V90	86
96791	3401 ALMA ST	1/2 - 1 S	W97	96
STAR GRAPHIC ARTS CO. INC.	3200 ASH ST	1/2 - 1 SW	AC122	128

Lower Elevation	Address	Dist / Dir	Map ID	Page
PIERS DAIRY	3065 LOUIS RD	1/4 - 1/2 NE	F27	27
PIERS DAIRY	3070 LOUIS RD	1/4 - 1/2 NE	F29	27
INTERNATIONAL POWER TECHNOLOGY	2800 W BAYSHORE RD	1/2 - 1 NE	N60	49
MUNICIPAL SERVICE CENTER	***3201 E BAYSHORE RD***	***1/2 - 1 NE***	***U80***	***69***
EMBARCADERO SHELL	1161 EMBARCADERO RD	1/2 - 1 N	AJ145	148

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, has revealed that there are 61 HAZNET sites within approximately 1 mile of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
JAMES D STEPHENS DDS	2875 MIDDLEFIELD ROAD	0 - 1/8 WSW	2	7
ARCO	***2995 MIDDLEFIELD RD***	***0 - 1/8 S***	***A7***	***8***
SOUTH PENINSULA VETERINARY EME	3045 MIDDLEFIELD ROAD	0 - 1/8 SSE	A9	14
MIDTOWN PHOTO	2729 MIDLEFIELD RD	1/8 - 1/4 WNW	12	16
AJ'S QUICK CLEANERS	3175 MIDDLEFIELD RD	1/4 - 1/2 SE	B13	16
AJ'S QUICK CLEANERS	***3175 MIDDLEFIELD RD***	***1/4 - 1/2 SE***	***B14***	***16***
SAINT MARKS EPISCOPAL CHURCH	600 COLORADO AVE	1/4 - 1/2 W	C16	17
1X SAINT MARKS OPISCAPOL CHURC	600 COLORADO AVE	1/4 - 1/2 W	C17	17

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
1X BRANDON BAILEY	840 WARREN WAY	1/4 - 1/2 NNW	36	32
1X 2388 WAVERLY AVE.	2388 WAVERLY AVE.	1/2 - 1 W	I39	32
1X PALO ALTO HOUSING CORP	3020 EMERSON	1/2 - 1 SSW	43	36
PARK AVENUE MOTORS	3290 PARK BLVD	1/2 - 1 SW	L49	42
PARK AVENUE MOTORS	***3290 PARK BLVD***	***1/2 - 1 SW***	***L50***	***42***
WILLIAM CHOW	2090 WEBSTER ST.	1/2 - 1 WNW	51	43
BARRON PARK AUTO SVC	3241 PARK AVE	1/2 - 1 SW	L52	43
PALO ALTO ELECTRIC MOTOR	3197 PARK BLVD	1/2 - 1 SW	53	43
LOCKHEED MISSLES & SPACE CO	3101 PARK BLVD	1/2 - 1 SW	M55	45
LOCKHEED MISSLES & SPACE CO	***3101 PARK BLVD***	***1/2 - 1 SW***	***M56***	***45***
STANFORD BMW	***3045 PARK BLVD***	***1/2 - 1 SW***	***M61***	***49***
PARK AUTOMOTIVE	3040 PARK BLVD	1/2 - 1 SW	M62	50
SABIN RESIDENCE	***491 SANTA RITA AVE***	***1/2 - 1 WNW***	***63***	***50***
ROBERT D UPTON DDS	3303 ALMA ST	1/2 - 1 S	64	54
CITY PALO ALTO	3600 MIDDLEFIELD RD	1/2 - 1 SE	O65	54
CITY OF PALO ALTO FIRE STATION	3600 MIDDLEFIELD RD	1/2 - 1 SE	O66	54
ARTS BODY SHOP	280 LAMBERT AVE	1/2 - 1 SW	P67	54
ARTS BODY SHOP	280 LAMBERT AVE	1/2 - 1 SW	P68	54
AKINS BODY SHOP INC	***2901 PARK BLVD***	***1/2 - 1 WSW***	***Q69***	***54***
ARCO SECURITIES INC	2891 PARK BLVD	1/2 - 1 WSW	Q71	58
PACIFIC BELL	***3350 BIRCH STREET***	***1/2 - 1 SW***	***S73***	***59***
PACIFIC TELEPHONE AND TELEGRAP	3350 BIRCH STREET	1/2 - 1 SW	S74	60
HELMINGS AUTO REPAIR	***300 LAMBERT AVE***	***1/2 - 1 SW***	***P75***	***60***
1X RMC LONESTAR	2785 PARK STREET	1/2 - 1 WSW	V85	78
VISICOM DESIGN GROUP	2635 PARK BLVD	1/2 - 1 WSW	AA114	115
SAY RAY	3251 ASH ST	1/2 - 1 SW	AC115	115
SAY RAY	***3251 ASH ST***	***1/2 - 1 SW***	***AC116***	***115***
CONSULTEX	260 SHERIDAN AVE	1/2 - 1 WSW	117	116
JEFFREY FROST DDS	3505 ALMA ST.	1/2 - 1 S	AE123	128
DAVID L VANDERWILT DDS	3515 ALMA ST	1/2 - 1 S	AE130	135
PRECISION AUTOMOTIVE SERVICE	439 LAMBERT AVE	1/2 - 1 SW	136	137
1X NORTH COUNTY OFFICE BUILDIN	270 GRANT AVE	1/2 - 1 WSW	AI140	144
1X COUNTY OF SANTA CLARA	270 GRANT AVE	1/2 - 1 WSW	AI141	145
TERV HARADA DDS	2421 PARK BLVD	1/2 - 1 WSW	148	152

Lower Elevation	Address	Dist / Dir	Map ID	Page
CUNNINGHAMS AUTO SERVICE	805 L UNIVERSITY AVE	1/4 - 1/2 ESE	28	27
YOUNG MENS CHRISTIAN ASSOCIATI	3412 ROSS ROAD	1/2 - 1 ESE	37	32
SPACE SYSTEMS/LORAL	1050 E MEADOW CIRCLE BL	1/2 - 1 E	R70	58
COHERENT MEDICAL GROUP	***3270 W BAYSHORE RD***	***1/2 - 1 ENE***	***T76***	***61***
MUNICIPAL SERVICE CENTER	***3201 E BAYSHORE RD***	***1/2 - 1 NE***	***U80***	***69***
PALO ALTO CITY OF/DEPT OF UTIL	3201 E BAYSHORE BLVD	1/2 - 1 NE	U81	71
BIOSYS	1057 EAST MEADOW CIRCLE	1/2 - 1 E	R99	96
CETUS IMMUNE CORPORATION	3400 W BAYSHORE	1/2 - 1 ENE	X100	96
STANGENES INDUSTRIES INC	1052 E MEADOW CIRCLE	1/2 - 1 E	Y102	99
MOZART RESTORATION	1068 EAST MEADOW CIRCLE	1/2 - 1 E	Z105	106
E MEADOW ASSOC	1069 E MEADOW CIRCLE	1/2 - 1 E	Z108	109
ASSAY TECHNOLOGY INC	1070 EAST MEADOW CIRCLE	1/2 - 1 E	Z113	114
CRYSTAL TECH. INC.	***1060 E. MEADOW CIRCLE***	***1/2 - 1 E***	***AD118***	***116***
SPACE SYSTEMS/LORAL	1036 E MEADOW CIR	1/2 - 1 E	AD127	131
CALIFORNIA PACIFIC COMMERICAL	1020 MEADOW CIRCLE	1/2 - 1 E	Y128	134
JEOL USA INC	3500 WEST BAYSHORE ROAD	1/2 - 1 E	AF129	134
BIOMYNE TECHNOLOGY COMPANY	3510 W BAYSHORE RD	1/2 - 1 E	AF133	136
SPACE SYSTEMS/LORAL	1085 E MEADOW CIR	1/2 - 1 ESE	AH137	137
BERNAD HODES ADVERTISING	1101 EMBARCADERO	1/2 - 1 N	AJ142	145

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 01/04/1999 has revealed that there are 17 RCRIS-SQG sites within approximately 1 mile of the subject property.

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
AJ'S QUICK CLEANERS	*3175 MIDDLEFIELD RD*	*1/4 - 1/2*	*SE*	*B14*	*16*
PARK AVENUE MOTORS	*3290 PARK BLVD*	*1/2 - 1*	*SW*	*L50*	*42*
STANFORD BMW	*3045 PARK BLVD*	*1/2 - 1*	*SW*	*M61*	*49*
AKINS BODY SHOP INC	*2901 PARK BLVD*	*1/2 - 1*	*WSW*	*Q69*	*54*
BIX	*2891 PARK BLVD*	*1/2 - 1*	*WSW*	*Q72*	*58*
PACIFIC BELL	*3350 BIRCH STREET*	*1/2 - 1*	*SW*	*S73*	*59*
HELMINGS AUTO REPAIR	*300 LAMBERT AVE*	*1/2 - 1*	*SW*	*P75*	*60*
SAY RAY	*3251 ASH ST*	*1/2 - 1*	*SW*	*AC116*	*115*
SYSTEMS CONTROL INC	*220 PORTAGE*	*1/2 - 1*	*SW*	*AC125*	*129*
VARIAN ASSOCIATES- LAMBERT SIT	*425 LAMBERT*	*1/2 - 1*	*SW*	*AC126*	*129*
STANFORD NISSAN INC	*473 ACACIA*	*1/2 - 1*	*SW*	*147*	*152*

Lower Elevation	Address	Dist / Dir		Map ID	Page
COHERENT MEDICAL GROUP	*3270 W BAYSHORE RD*	*1/2 - 1*	*ENE*	*T76*	*61*
QUANTEL	*3290 W BAYSHORE*	*1/2 - 1*	*ENE*	*T82*	*76*
SYSTEMIX INC	*3400 W BAYSHORE*	*1/2 - 1*	*ENE*	*X101*	*99*
KAPTRON INC	*2525 E BAYSHORE FRONTAG*	*1/2 - 1*	*NNE*	*124*	*128*
FORD AEROSPACE CORP	*1085 E MEADOW CIR*	*1/2 - 1*	*ESE*	*AH138*	*138*
SHELL OIL CO	*1161 EMBARCADERO*	*1/2 - 1*	*N*	*AJ146*	*149*

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-LQG list, as provided by EDR, and dated 01/04/1999 has revealed that there are 5 RCRIS-LQG sites within approximately 1 mile of the subject property.

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
LOCKHEED MISSLES & SPACE CO	*3101 PARK BLVD*	*1/2 - 1*	*SW*	*M56*	*45*

Lower Elevation	Address	Dist / Dir		Map ID	Page
PALO ALTO CITY OF DEPT OF UTIL	*3201 E BAYSHORE*	*1/2 - 1*	*NE*	*U77*	*64*
SPACE SYSTEM LORAL	*1034 E MEADOW CIR BLDG*	*1/2 - 1*	*E*	*Y111*	*114*
CRYSTAL TECH. INC.	*1060 E. MEADOW CIRCLE*	*1/2 - 1*	*E*	*AD118*	*116*
CRYSTAL TECHNOLOGY INC	1035 E MEADOW CIR	1/2 - 1	E	AD134	136

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 12/31/1998 has revealed that there are 4 ERNS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir		Map ID	Page
2995 MIDDLEFIELD RD	2995 MIDDLEFIELD RD	0 - 1/8	S	A4	7

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
2680 MIDDLEFIELD RC	2680 MIDDLEFIELD RC	1/4 - 1/2W	18	18

Lower Elevation	Address	Dist / Dir	Map ID	Page
842 WINTERGREEN AVENUE	842 WINTERGREEN AVENUE	1/8 - 1/4ENE	11	15
3303 THOMAS DR	3303 THOMAS DR	1/2 - 1 E	44	37

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 01/08/1999 has revealed that there are 4 FINDS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
EXQUISITE DRY CLEANERS	706 COLORADO AVENUE	1/8 - 1/4WNW	10	15
AJ'S QUICK CLEAN CENTER	3175 MIDDLEFIELD ROAD	1/4 - 1/2SE	B15	17
ECOLE FRANCO-AMERICAINE	870 NORTH CALIFORNIA	1/2 - 1 NNW	48	42

Lower Elevation	Address	Dist / Dir	Map ID	Page
CHEM MARK OF SANTA CLARA COUNT	897 LEONG DR	1/4 - 1/2ENE	25	23

CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the CA SLIC list, as provided by EDR, has revealed that there are 19 CA SLIC sites within approximately 1.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
HAMMON PLATING	715 LOMA VERDE AVE	1/4 - 1/2SE	B19	18
AKINS BODY SHOP INC	***2901 PARK BLVD***	***1/2 - 1 WSW***	***Q69***	***54***
VANCE BROWN AND SONS		***1/2 - 1 WSW***	***V89***	***82***
OREGON EXPWY UNDERPASS	***OREGON EXPWY & ALMA ST***	***1/2 - 1 WSW***	***104***	***102***
SUMMERHILL (CHEVRON BULK OIL)	***2655 PARK BLVD***	***1/2 - 1 WSW***	***AA109***	***109***
DURA-BOND	***3201 ASH ST***	***1/2 - 1 SW***	***AC120***	***125***
BEMISS JASON CORP	250 PORTAGE AVE	1/2 - 1 SW	AC131	135
FORMER DURA-BOND FACILITY	370 PORTAGE AVE	1 - 2 SW	AK149	152
HEWLETT PACKARD MFG DIV	***395 PAGE MILL RD***	***1 - 2 WSW***	***AL150***	***153***
CLOCKTOWER PLAZA/PREFORMED LIN	***600 HANSEN WAY***	***1 - 2 SW***	***AO162***	***181***
VARIAN	***611 HANSEN WAY***	***1 - 2 SW***	***AO167***	***188***
STANFORD CLEANERS	***2875 EL CAMINO***	***1 - 2 SW***	***172***	***198***
BP MOBIL	***2780 EL CAMINO REAL***	***1 - 2 SW***	***AS178***	***214***
HEWLETT-PACKARD (620-640 PAGE	***620 - 640 PAGE MILL RD.***	***1 - 2 SW***	***AS183***	***222***

Lower Elevation	Address	Dist / Dir	Map ID	Page
MUNICIPAL SERVICE CENTER	***3201 E BAYSHORE RD***	***1/2 - 1 NE***	***U80***	***69***

Lower Elevation	Address	Dist / Dir	Map ID	Page
BATTON PROPERTY	*1060 E MEADOW CIR*	*1/2 - 1 E*	*R92*	*86*
PRUDENTIAL INSURANCE CO OF AME	*1053-1057 E MEADOW CIR*	*1/2 - 1 E*	*Y103*	*99*
FORD AEROSPACE CORP	*1085 E MEADOW CIR*	*1/2 - 1 ESE*	*AH138*	*138*
MCATEE RESIDENCE	*51 PRIMROSE WAY*	*1/2 - 1 NNW*	*143*	*145*

BEP: Bond Expenditure Plan comes from the Department of Health Services.

A review of the Ca. BEP list, as provided by EDR, has revealed that there are 2 Ca. BEP sites within approximately 1.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
VARIAN	*611 HANSEN WAY*	*1 - 2 SW*	*AO167*	*188*
HEWLETT-PACKARD OPTOELECTRIC D	640 PAGE MILL ROAD	1 - 2 SW	AS182	222

BI: Hazardous Materials Business Plan, Hazardous Waste Generator, Underground Storage tanks

A review of the Ca. BI list, as provided by EDR, has revealed that there is 1 Ca. BI site within approximately 1 mile of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
FRANCISCO VAQUEZ	2575 MIDDLEFIELD RD # A	1/4 - 1/2 WNW	G32	30

S Bay Reg. 2: Groundwater pollution cases in the Santa Clara Valley where regulatory lead is San Francisco Bay Regional Water Quality Control Board.

A review of the S Bay Reg. 2 list, as provided by EDR, has revealed that there are 8 S Bay Reg. 2 sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ARCO	*2995 MIDDLEFIELD RD*	*0 - 1/8 S*	*A7*	*8*
SHELL	*3011 MIDDLEFIELD RD*	*0 - 1/8 S*	*A8*	*11*
PINN BROTHERS CONSTRUCTION INC	*759 LOMA VERDE AVE*	*1/4 - 1/2 ESE*	*E23*	*20*
SNELL RESIDENCE	*2388 WAVERLEY ST*	*1/2 - 1 W*	*I42*	*33*
MCOMBER PROPERTY	*2175 COWPER ST*	*1/2 - 1 WNW*	*K46*	*37*
FAIR OAKS APARTMENTS	555 E WASHINGTON AVE	1/2 - 1 WNW	47	40

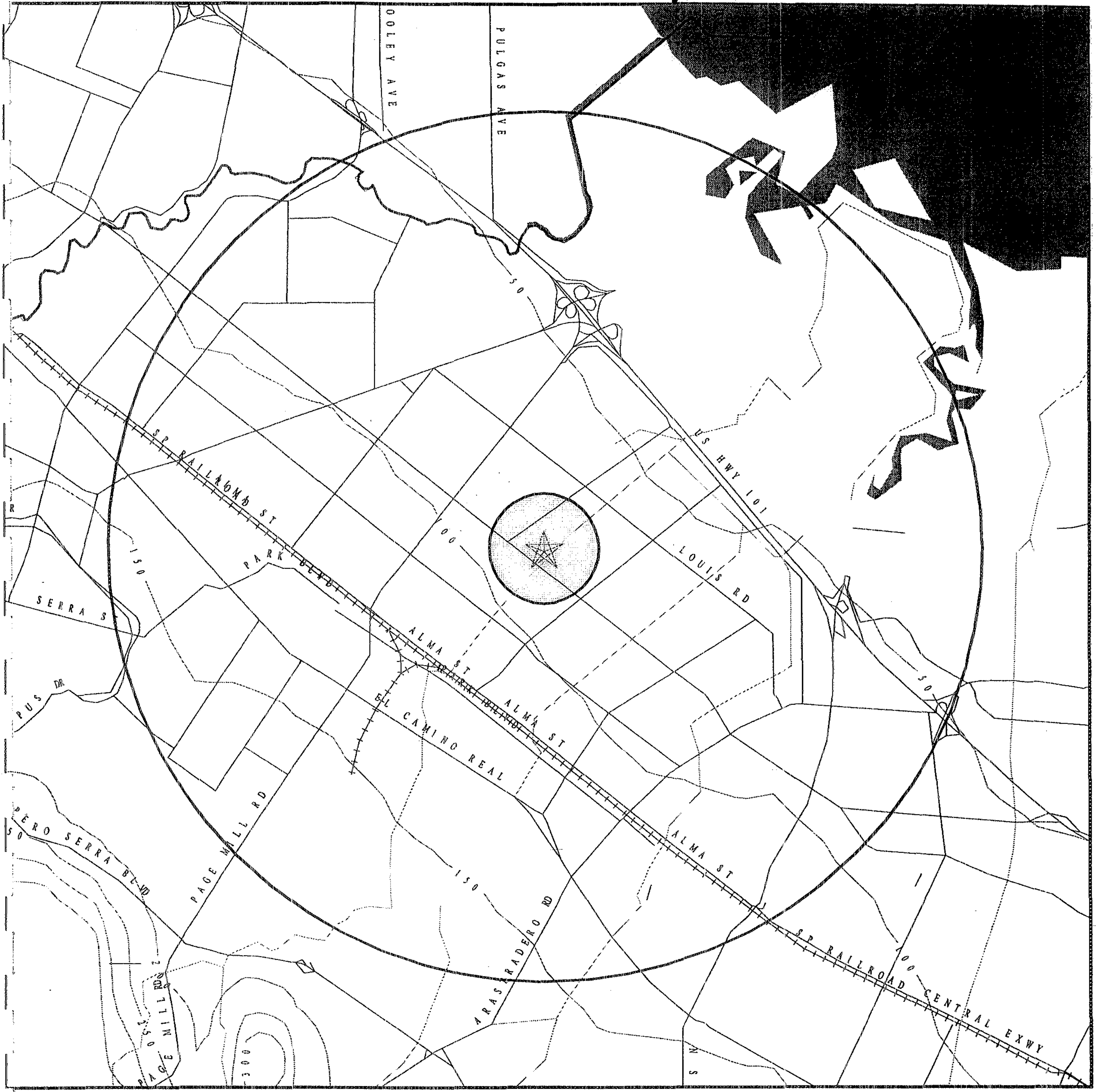
Lower Elevation	Address	Dist / Dir	Map ID	Page
OLD PIERS DAIRY	*3065 LOUIS RD*	*1/4 - 1/2 NE*	*F26*	*23*
MEGHER PROPERTY	*3070 LOUIS RD*	*1/4 - 1/2 NE*	*F30*	*27*

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
PALO ALTO MUNI REFUSE DSPL AREA	CERC-NFRAP,HAZNET,Cal-Sites
RAVENSWOOD INDUSTRIAL AREA	CERCLIS,FINDS
VICTORIA LANE SHOPPING CENTER	LUST
GALVEZ GAS STATION	LUST
STANFRORD HONDA	LUST
STANFORD UNIVERSITY	LUST
STANFORD UNIVERSITY	LUST
SUN RAY FOREIGN AUTO SERVICE	UST
1X PALTO ALTO MAIN POST OFFICE	HAZNET
SHELL OIL CO #204-5802-1506	HAZNET
CITY PALO ALTO	HAZNET
BLAISE CHIROPRACTIC, INC.	HAZNET
PALO ALTO GAS RECOVERY C/O EDS	HAZNET
WPI PACKAGING & MAINTENANCE INC	HAZNET
PALO ALTO RECYCLING CENTER	HAZNET
NORTH COUNTY COURTHOUSE/SANTA CLARA COUN	HAZNET
1X PALO ALTO UNIFIED SCHOOL DISTRICT	HAZNET
PRODIGY PRESS INC	HAZNET
1X W F BATTON & CO INC	HAZNET
1X MIDPENINSULA REG OPEN SPACE DIST	HAZNET
1X PALO ALTO UNIFIED SCH. DISTRICT	HAZNET
BAY LAUREL INVESTMENT COMPANY	HAZNET
ANDY AND WORTH LUDWICK	HAZNET
SAN LUIS OBISPO COUNTY/ENVIRON HEALTH	HAZNET
PACIFIC BELL	RCRIS-SQG,FINDS
BARREN CREEK	ERNS
ON CREEK FR: EL CAMINO REAL RD *87	ERNS
DRY CREEK BED/REAR :HOUSE	ERNS
NPD-VARIAN	Ca. WDS
WDR-SOLID WASTE DISPOSAL SITE	Ca. WDS
RAINER SERVICE STATION	Ca. BI

TOPOGRAPHIC MAP - 0361233.1r - Lowney Associates

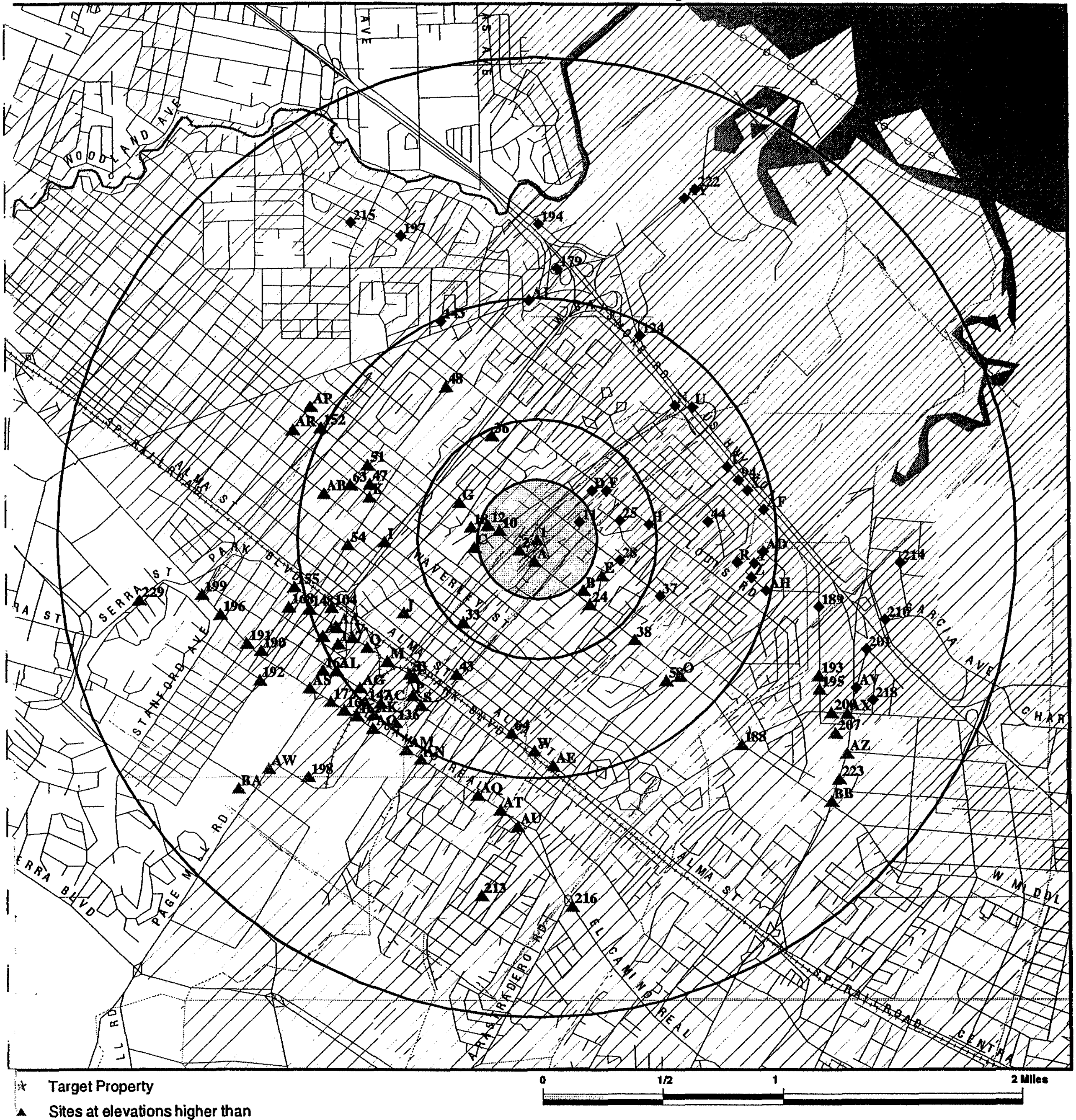


Source: US Geological Survey 1-Degree Digital Elevation Model
Compiled 09/15/92

- Major Roads
- Contour lines (25 foot interval unless otherwise shown)
- Waterways
- Earthquake fault lines

TARGET PROPERTY:	Matadero Creek	CUSTOMER:	Lowney Associates
ADRESS:	Alma St + 101	CONTACT:	Gretchen Snoey
CITY/STATE/ZIP:	Palo Alto CA 94303	INQUIRY #:	0361233.1r
LAT/LONG:	37.43243 / 122.12457	DATE:	April 21, 1999

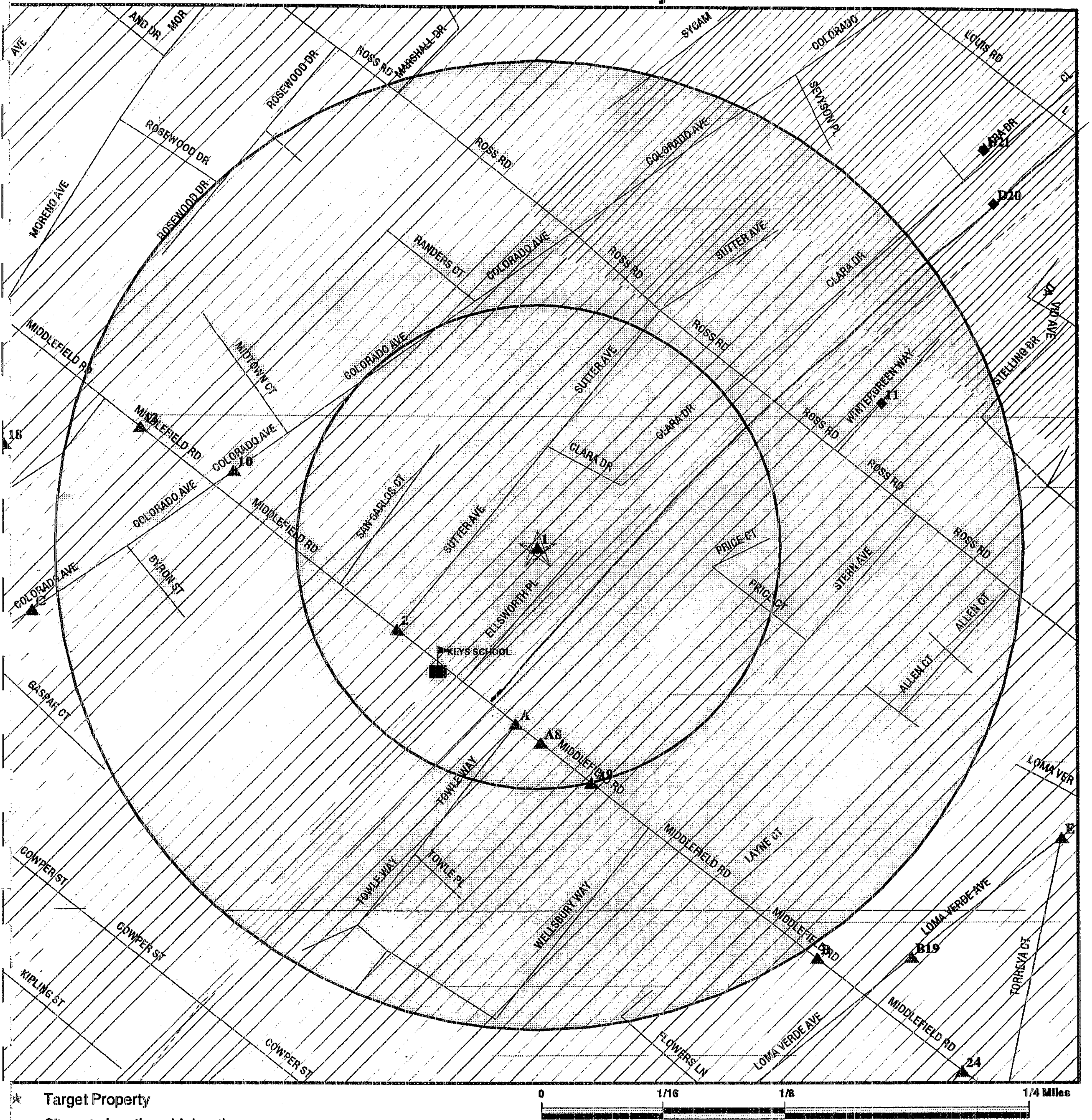
OVERVIEW MAP - 0361233.1r - Lowney Associates



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites (if requested)
- ▨ National Priority List Sites
- ▨ Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- ▨ 100-year flood zone
- ▨ 500-year flood zone

TARGET PROPERTY:	Matadero Creek	CUSTOMER:	Lowney Associates
ADDRESS:	Alma St + 101	CONTACT:	Gretchen Snoey
CITY/STATE/ZIP:	Palo Alto CA 94303	INQUIRY #:	0361233.1r
LAT/LONG:	37.4324 / 122.1246	DATE:	April 21, 1999 5:54 pm

DETAIL MAP - 0361233.1r - Lowney Associates



☆ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Coal Gasification Sites (if requested)

Sensitive Receptors

National Priority List Sites

Landfill Sites

Power transmission lines

Oil & Gas pipelines

▨ 100-year flood zone

▨ 500-year flood zone

TARGET PROPERTY:	Matadero Creek	CUSTOMER:	Lowney Associates
ADDRESS:	Alma St + 101	CONTACT:	Gretchen Snoey
CITY/STATE/ZIP:	Palo Alto CA 94303	INQUIRY #:	0361233.1r
LAT/LONG:	37.4324 / 122.1246	DATE:	April 21, 1999 6:00 pm

MAP FINDINGS SUMMARY SHOWING ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.750	0	0	0	0	0	0
Delisted NPL		0.750	0	0	0	0	NR	0
RCRIS-TSD		1.250	0	0	0	0	2	2
AWP		1.750	0	0	0	0	0	0
Cal-Sites		1.750	0	0	0	2	6	8
Notify 65		1.750	0	0	0	0	2	2
CHMIRS		1.750	0	0	1	2	14	17
Cortese		1.750	1	0	2	4	34	41
Toxic Pits		1.750	0	0	0	0	0	0
CERCLIS		1.250	0	0	0	0	1	1
CERC-NFRAP		0.750	0	0	0	0	NR	0
CORRACTS		1.750	0	0	0	0	4	4
State Landfill		1.250	0	0	1	1	0	2
LUST		1.250	3	0	5	19	31	58
UST		1.000	1	0	3	12	NR	16
CA FID		1.000	1	0	3	12	NR	16
AST		0.750	0	0	0	0	NR	0
RAATS		0.750	0	0	0	0	NR	0
WMUDS/SWAT		1.250	0	0	0	0	0	0
HAZNET		1.000	3	1	6	51	NR	61
RCRIS Sm. Quan. Gen.		1.000	0	0	1	16	NR	17
RCRIS Lg. Quan. Gen.		1.000	0	0	0	5	NR	5
HMIRS		0.750	0	0	0	0	NR	0
PADS		0.750	0	0	0	0	NR	0
ERNS	X	0.750	1	1	1	1	NR	4
FINDS		0.750	0	1	2	8	NR	11
TRIS		0.750	0	0	0	0	NR	0
TSCA		0.750	0	0	0	0	NR	0
MLTS		0.750	0	0	0	0	NR	0
NPL Liens		0.750	0	0	0	0	NR	0
CA SLIC		1.250	0	0	1	11	8	20
CA Bond Exp. Plan		1.750	0	0	0	0	2	2
ROD		1.750	0	0	0	0	0	0
CONSENT		1.750	0	0	0	0	0	0
CA WDS		0.750	0	0	0	0	NR	0
Business Inventory		1.000	0	0	1	0	NR	1
South Bay Region 2		0.750	2	0	3	6	NR	11
Coal Gas		1.750	0	0	0	0	0	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS SUMMARY SHOWING
ONLY SITES HIGHER THAN OR THE SAME ELEVATION AS TP

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.750	0	0	0	0	0	0
Delisted NPL		0.750	0	0	0	0	NR	0
RCRIS-TSD		1.250	0	0	0	0	1	1
AWP		1.750	0	0	0	0	0	0
Cal-Sites		1.750	0	0	0	1	5	6
Notify 65		1.750	0	0	0	0	2	2
CHMIRS		1.750	0	0	1	2	8	11
Cortese		1.750	1	0	1	3	27	32
Toxic Pits		1.750	0	0	0	0	0	0
CERCLIS		1.250	0	0	0	0	1	1
CERC-NFRAP		0.750	0	0	0	0	NR	0
CORRACTS		1.750	0	0	0	0	3	3
State Landfill		1.250	0	0	0	0	0	0
LUST		1.250	3	0	2	16	31	52
UST		1.000	1	0	1	8	NR	10
CA FID		1.000	1	0	1	9	NR	11
AST		0.750	0	0	0	0	NR	0
RAATS		0.750	0	0	0	0	NR	0
WMUDS/SWAT		1.250	0	0	0	0	0	0
HAZNET		1.000	3	1	5	33	NR	42
RCRIS Sm. Quan. Gen.		1.000	0	0	1	10	NR	11
RCRIS Lg. Quan. Gen.		1.000	0	0	0	1	NR	1
HMIRS		0.750	0	0	0	0	NR	0
PADS		0.750	0	0	0	0	NR	0
ERNS	X	0.750	1	0	1	0	NR	2
FINDS		0.750	0	1	1	8	NR	10
TRIS		0.750	0	0	0	0	NR	0
TSCA		0.750	0	0	0	0	NR	0
MLTS		0.750	0	0	0	0	NR	0
NPL Liens		0.750	0	0	0	0	NR	0
CA SLIC		1.250	0	0	1	6	8	15
CA Bond Exp. Plan		1.750	0	0	0	0	2	2
ROD		1.750	0	0	0	0	0	0
CONSENT		1.750	0	0	0	0	0	0
CA WDS		0.750	0	0	0	0	NR	0
Business Inventory		1.000	0	0	1	0	NR	1
South Bay Region 2		0.750	2	0	1	6	NR	9
Coal Gas		1.750	0	0	0	0	0	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
1 Target Property	**MATADERO CREEK AT SR 101 MATADERO CREEK AT SR 101 PALO ALTO, CA 94301**	**ERNS**	**90175900 N/A**
2 WSW < 1/8 446 Higher	**JAMES D STEPHENS DDS 2875 MIDDLEFIELD ROAD PALO ALTO, CA 94306**	**HAZNET**	**S102813207 N/A**
A3 South < 1/8 486 Higher	**ARCO FAC #4430 2995 MIDDLEFIELD RD PALO ALTO, CA 94303**	**Ca. FID**	**S101594390 N/A**

FID:

Facility ID:	43000346	Regulate ID:	CAL000021
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 494-0518
Mail To:	Not reported 17315 STUDEDAKER RD PALO ALTO, CA 94303		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A4 South < 1/8 486 Higher	**2995 MIDDLEFIELD RD 2995 MIDDLEFIELD RD PALO ALTO, CA**	**ERNS**	**92259030 N/A**
A5 South < 1/8 486 Higher	**ARCO #4430 2995 MIDDLEFIELD RD PALO ALTO, CA**	**LUST**	**S102424252 N/A**

LUST Region SC:

Facility ID:	06S2W07C02	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	0433		

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A6 South < 1/8 486 Higher	**D M ORTIZ 2995 MIDDLEFIELD RD PALO ALTO, CA 94303**	**UST**	**U001595866 N/A**

D M ORTIZ (Continued) **U001595866**

State UST:

Facility ID:	27051		
Tank Num:	1	Container Num:	0000000001
Tank Capacity:	8000	Year Installed:	1966
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000240 inches
Leak Detection:	Stock Inventor		
Contact Name:	Not reported	Telephone:	(000) 000-0000
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	27051		
Tank Num:	2	Container Num:	0000000002
Tank Capacity:	8000	Year Installed:	1966
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000240 inches
Leak Detection:	Stock Inventor		
Contact Name:	Not reported	Telephone:	(000) 000-0000
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	27051		
Tank Num:	3	Container Num:	0000000003
Tank Capacity:	10000	Year Installed:	1966
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000240 inches
Leak Detection:	Stock Inventor		
Contact Name:	Not reported	Telephone:	(000) 000-0000
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	27051		
Tank Num:	4	Container Num:	0000000004
Tank Capacity:	500	Year Installed:	1966
Tank Used for:	PRODUCT		
Type of Fuel:	WASTE OIL	Tank Constrctn:	0000093 inches
Leak Detection:	Stock Inventor		
Contact Name:	Not reported	Telephone:	(000) 000-0000
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

A7 **South** **< 1/8** **486** **Higher**	**ARCO** **2995 MIDDLEFIELD RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **HAZNET** **LUST**	**S101303801** **N/A**

ARCO (Continued) **S101303801**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Remove Free Product - remove floating product from water table, Pending		
Review Date:	03/26/1998	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	09/30/1986
Pollution Char:	02/28/1987	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	02/02/1983

LUST Region 2:

File Number:	43-0107	Lat/Long:	37.431063 / -122.124565
Region:	2		
Entered Date:	Not reported	Last Review:	01/11/1999
Correspondence:	03-JAN-99	Report Date:	02/02/1983
Case Number:	06S2W07C02	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/12/1987
How Stopped:	Close Tank	Stopped Date:	02/12/1987
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	3700
Maximum Groundwater Impact:	24000
Current Benzene in Groundwater:	79
Maximum Benzene Concentration:	62000
Nuber of Wells:	17
Depth to Groundwater:	6.38
MTBE Contamination Level:	13
Maximum MTBE:	190
Interim Remediation:	Yes
Interim Remediation Date:	21-DEC-90
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	30-SEP-86
Pollution Characterization:	28-FEB-87
Corrective Action Plan:	Not reported

ARCO (Continued) **S101303801**

Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Pump and Treat Ground Water
Comments: [MAXBENZENE] QUESTIONABLE. MAXGW=GASOLINE.

CORTESE:
Reg By: LTNKA
Reg Id: 43-0107
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0107	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 7.0 (Feet)
Maximum Soil Concentration of Contaminates: 3700 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: 62000
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported

ARCO (Continued) **S101303801**

Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

A8 **South** **< 1/8** **534** **Higher**	**SHELL** **3011 MIDDLEFIELD RD** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S101309090** **N/A**

SHELL (Continued) **S101309090**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Pump and Treat Ground Water - generally employed to remove dissolved contaminants		
Review Date:	06/07/1996	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	01/06/1986
Pollution Char:	06/03/1986	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	05/25/1996	Release Date:	11/12/1988

LUST Region 2:

File Number:	43-1311	Lat/Long:	37.430967 / -122.124421
Region:	2		
Entered Date:	Not reported	Last Review:	06/07/1996
Correspondence:	25-MAY-96	Report Date:	11/12/1988
Case Number:	06S2W07C01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	04/25/1989
How Stopped:	Close Tank	Stopped Date:	04/25/1989
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Misc. Motor Vehicle Fuels
Maximum Soil Concentration:	6300
Maximum Groundwater Impact:	Free product in the well
Current Benzene in Groundwater:	4
Maximum Benzene Concentration:	4
Nuber of Wells:	Not reported
Depth to Groundwater:	8
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	Yes
Interim Remediation Date:	12-NOV-86
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	06-JAN-86
Pollution Characterization:	03-JUN-86
Corrective Action Plan:	Not reported

SHELL (Continued) **S101309090**

Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 25-MAY-96
Abatement: Excavate and Dispose (landfill) of soil, Excavate and Treat soil. (e.g. aeration, biodegradation, etc.), Pump and Treat Ground Water
Comments: ARCHIVED 11/1/96 CONTROL NO 120-122 SRC 0904772 122

LUST Region SC:

Facility ID:	06S2W07C01	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	5/25/96
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O423		

South Bay Region 2:

Facility ID:	43-1311	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Waste Oil
Secondary Substance Spilled: Misc. Motor Vehicle Fuels
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 8 (Feet)
Maximum Soil Concentration of Contaminates: 6300 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: 4
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported

SHELL (Continued) **S101309090**

Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

A9 **SSE** **< 1/8** **660** **Higher**	**SOUTH PENINSULA VETERINARY EME** **3045 MIDDLEFIELD ROAD** **PALO ALTO, CA 94306**	**HAZNET**	**S100874613** **N/A**

SOUTH PENINSULA VETERINARY EME (Continued) **S100874613**

HAZNET:

Year:	Not reported		
Gepaid:	CAL000044509	Tepaid:	CAL922955281
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	3
Tsd Name:	DIAGNOSTIC X RAY IMAGING INC		
Tsd Address:	636 NEWHALL STREET SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	541		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAL000044509	Tepaid:	CAL922955281
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	29
Tsd Name:	DIAGNOSTIC X RAY IMAGING INC		
Tsd Address:	636 NEWHALL STREET SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	541		
Disposal Method:	R01		

Year:	Not reported		
Gepaid:	CAL000044509	Tepaid:	CAL922955281
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	5
Tsd Name:	DIAGNOSTIC X RAY IMAGING INC		
Tsd Address:	636 NEWHALL STREET SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	541		
Disposal Method:	T03		

10
WNW
1/8-1/4
856
Higher

EXQUISITE DRY CLEANERS
706 COLORADO AVENUE
PALO ALTO, CA 94303

FINDS **1001263076**
CA0843187

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

11
ENE
1/8-1/4
1018
Lower

842 WINTERGREEN AVENUE
842 WINTERGREEN AVENUE
PALO ALTO, CA

ERNS **93314883**
N/A

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
12 **WNW** **1/8-1/4** **1133** **Higher**	**MIDTOWN PHOTO** **2729 MIDLEFIELD RD** **PALO ALTO, CA 94306**	**HAZNET**	**S102826782** **N/A**
B13 **SE** **1/4-1/2** **1357** **Higher**	**AJ'S QUICK CLEANERS** **3175 MIDDLEFIELD RD** **PALO ALTO, CA 94306**	**HAZNET**	**S100854314** **N/A**
B14 **SE** **1/4-1/2** **1357** **Higher**	**AJ'S QUICK CLEANERS** **3175 MIDDLEFIELD RD** **PALO ALTO, CA 94306**	**RCRIS-SQG** **HAZNET**	**1000375579** **CAD981658313**

RCRIS:

Owner:	BENA EVELYN (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (415) 494-1550
Record Date:	09/01/1996
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

HAZNET:

Year:	Not reported		
Gepaid:	CAD981658313	Tepaid:	CAT000613893
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	39
Tsd Name:	SAFETY-KLEEN CORP (7-088-06)		
Tsd Address:	10625 HICKSON ST#A EL MONTE		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	741		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAD981658313	Tepaid:	CAT000613893
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	9
Tsd Name:	SAFETY-KLEEN CORP (7-088-06)		
Tsd Address:	10625 HICKSON ST#A EL MONTE		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	741		
Disposal Method:	UNK		

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
B15 **SE** **1/4-1/2** **1357** **Higher**	**AJ'S QUICK CLEAN CENTER** **3175 MIDDLEFIELD ROAD** **PALO ALTO, CA 94306**	**FINDS**	**1001266653** **CA0843188**

FINDS:

Other Pertinent Environmental Activity Identified at Site:

AIRS Facility System (AIRS/AFS)

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
C16 **West** **1/4-1/2** **1394** **Higher**	**SAINT MARKS EPISCOPAL CHURCH** **600 COLORADO AVE** **PALO ALTO, CA 94306**	**HAZNET**	**S100872926** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAC001019488	Tepaid:	CAL000027741
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	505
Tsd Name:	CALIFORNIA ASBESTOS MONOFILL		
Tsd Address:	O'BYRNES FERRY RD COPPEROPOLIS		
Tsd County	Calaveras		
Mailing Address:	Not reported		
Category:	151		
Disposal Method:	D80		

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
C17 **West** **1/4-1/2** **1394** **Higher**	**1X SAINT MARKS OPISCAPOL CHURCH** **600 COLORADO AVE** **PALO ALTO, CA 00000**	**HAZNET**	**S100852653** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAC000784000	Tepaid:	CAD990794133
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	3034
Tsd Name:	FORWARD INC		
Tsd Address:	1145 WEST CHARTER MANTECA		
Tsd County	San Joaquin		
Mailing Address:	Not reported		
Category:	151		
Disposal Method:	D80		

1X SAINT MARKS OPISCAPOL CHURCH (Continued) **S100852653**

Year:	93		
Gepaid:	CAC000784000	Tepaid:	CAD990794133
Contact:	ROSALIE J GATES CONTROLLER	Telephone:	(209) 466-4482
Gen County:	Santa Clara	Tons:	30.34
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Joaquin		
Mailing Address:	P O BOX 6336 STOCKTON, CA 95206		
Category:	151		
Disposal Method:	D80		

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18 **West** **1/4-1/2** **1486** **Higher**	**2680 MIDDLEFIELD RC** **2680 MIDDLEFIELD RC** **REDWOOD CITY, CA 94063**	**ERNS**	**92292637** **N/A**
B19 **SE** **1/4-1/2** **1511** **Higher**	**HAMMON PLATING** **715 LOMA VERDE AVE** **PALO ALTO, CA 94304**	**CA SLIC**	**S102405501** **N/A**

HAMMON PLATING (Continued) **S102405501**

SLIC Region 2:

Facility ID:	43S2042
Region:	2
Facility Status:	No Further Action

D20 **NE** **1/4-1/2** **1554** **Lower**	**PIERS DAIRY** **3070 LOVIS ROAD** **PALO ALTO, CA 94303**	**UST**	**U001595893** **N/A**

State UST:

Facility ID:	58749		
Tank Num:	1	Container Num:	4
Tank Capacity:	550	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	EDSON PIERS	Telephone:	(415) 369-9200
Total Tanks:	0	Region:	Not reported
Facility Type:	2	Other Type:	DISTRIBUTOR

Facility ID:	58749		
Tank Num:	2	Container Num:	3
Tank Capacity:	1000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	EDSON PIERS	Telephone:	(415) 369-9200
Total Tanks:	0	Region:	Not reported
Facility Type:	2	Other Type:	DISTRIBUTOR

D21 **NE** **1/4-1/2** **1624** **Lower**	**PIERS DAIRY** **3065 LOVIS ROAD** **PALO ALTO, CA 94303**	**UST**	**U001595892** **N/A**

State UST:

Facility ID:	58748		
Tank Num:	1	Container Num:	2
Tank Capacity:	40000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	EDSON PIERS	Telephone:	(415) 369-9200
Total Tanks:	0	Region:	Not reported
Facility Type:	2	Other Type:	DISTRIBUTOR

PIERS DAIRY (Continued) **U001595892**

Facility ID:	58748		
Tank Num:	2	Container Num:	1
Tank Capacity:	4000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	EDSON PIERS	Telephone:	(415) 369-9200
Total Tanks:	0	Region:	Not reported
Facility Type:	2	Other Type:	DISTRIBUTOR

E22
ESE
1/4-1/2
1626
Higher

PINN BROTHERS CONSTRUCTION CO.
759 LOMA VERDE AVE
PALO ALTO, CA

LUST **S103474231**
N/A

LUST Region SC:

Facility ID:	06S2W07B01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Adele Shepherd	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O121		

E23
ESE
1/4-1/2
1626
Higher

PINN BROTHERS CONSTRUCTION INC
759 LOMA VERDE AVE
PALO ALTO, CA

S Bay Reg. 2
Cortese
LUST

S100234874
N/A

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	05/04/1998	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	05/04/1998	Release Date:	10/30/1984

LUST Region 2:

File Number:	43-1066	Lat/Long:	37.430372 / -122.119668
Region:	2		
Entered Date:	Not reported	Last Review:	05/04/1998
Correspondence:	13-MAY-98	Report Date:	10/30/1984
Case Number:	06S2W07B01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	10/30/1984
How Stopped:	Close Tank	Stopped Date:	10/30/1984
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		

PINN BROTHERS CONSTRUCTION INC (Continued) **S100234874**

Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: 1900
Maximum Groundwater Impact: 1700
Current Benzene in Groundwater: 5
Maximum Benzene Concentration: 13
Nuber of Wells: 3
Depth to Groundwater: 8
MTBE Contamination Level: -12
Maximum MTBE: -12
Interim Remediation: Yes
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: 04-MAY-98
Abatement: Excavate and Dispose (landfill) of soil
Comments: ABATEMETHOD MAYBE WRONG--NOT FULLY DOCUMENTED.

CORTESE:
Reg By: LTNKA
Reg Id: 43-1066
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1066	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Diesel
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported

PINN BROTHERS CONSTRUCTION INC (Continued) **S100234874**

Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	900 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported

PINN BROTHERS CONSTRUCTION INC (Continued) **S100234874**

Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

24 **SE** **1/4-1/2** **1837** **Higher**	**ZOHRAB'S ARCO GARAGE** **3233 MIDDLEFIELD RD** **MENLO PARK, CA 94025**	Ca. FID	**S101594064** **N/A**

FID:

Facility ID:	41004901	Regulate ID:	Not reported
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 000-0000
Mail To:	Not reported 3233 MIDDLEFIELD RD MENLO PARK, CA 94025		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

25 **ENE** **1/4-1/2** **1870** **Lower**	**CHEM MARK OF SANTA CLARA COUNT** **897 LEONG DR** **MOUNTAIN VIEW, CA 94043**	**FINDS**	**1000590857** **I09#19950306**

FINDS:

Other Pertinent Environmental Activity Identified at Site:

- National Compliance Database (NCDB)
- Section Seven Tracking System (SSTS)

F26 **NE** **1/4-1/2** **1872** **Lower**	**OLD PIERS DAIRY** **3065 LOUIS RD** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST** **SWF/LF**	**S102361668** **N/A**

OLD PIERS DAIRY (Continued) **S102361668**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Regional Board		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	07/25/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	10/21/1985	Release Date:	12/14/1984

LUST Region 2:

File Number:	43-0997	Lat/Long:	37.435436 / -122.119178
Region:	2		
Entered Date:	Not reported	Last Review:	07/25/1997
Correspondence:	05-NOV-85	Report Date:	12/14/1984
Case Number:	Not reported	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/14/1984
How Stopped:	Close Tank	Stopped Date:	12/14/1984
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	-1
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	Yes
Interim Remediation Date:	Not reported
Lead Agency:	Regional Board
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported

OLD PIERS DAIRY (Continued) **S102361668**

Assessment Underway: Not reported
Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 21-OCT-85
Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 7/25/97 CONTROL NO 120-147 SRC 0904797 147

LUST Region SC:

Facility ID:	06S2W06K01	Region:	Santa Clara
Facility Status:	Sign Off by SFRWQCB	Facility Region:	SANTA CLARA
Case Worker:	Case Closed	Closed Date:	10/21/85
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	S221		

LF:

Facility ID: 32-CR-0021
Operator: Not reported
Operator Addr: Not reported
Operator Phone: Not reported
Owner: Not reported
Owner Address: Not reported
Activity: Solid Waste Disposal Site
Operator's Status: Closed
Regulation Status: Pre-regulations
Region: STATE
Lat/Long: 39.80000 / -120.46667
Waste Accepted: Not reported
Surrounding Land: Not reported
Report of Facility Info Date: Not reported
Report of Facility Info Amendment: Not reported
Permitted Throughput with Units: Not reported
Actual Throughput with Units: Not reported
Actual Capacity with Units: Not reported
Permited Capacity with Units: Not reported
Remaining Capacity with Units: Not reported
Permitted Total Acreage: Not reported
Actual Total Acreage: Not reported
Permitted Disposal Acreage: Not reported
Actual Disposal Acreage: Not reported
Inspection Frequency: Annual

South Bay Region 2:

Facility ID:	43-0997 .	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Regional Board
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED

OLD PIERS DAIRY (Continued) **S102361668**

Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	-1 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported

OLD PIERS DAIRY (Continued) **S102361668**

Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

F27 **NE** **1/4-1/2** **1872** **Lower**	**PIERS DAIRY** **3065 LOUIS RD** **PALO ALTO, CA 94303**	**Ca. FID**	**S101623408** **N/A**
28 **ESE** **1/4-1/2** **1879** **Lower**	**CUNNINGHAMS AUTO SERVICE** **805 L UNIVERSITY AVE** **LOS GATOS, CA**	**HAZNET**	**S100933440** **N/A**
F29 **NE** **1/4-1/2** **1882** **Lower**	**PIERS DAIRY** **3070 LOUIS RD** **PALO ALTO, CA 94303**	**Ca. FID**	**S101630247** **N/A**
F30 **NE** **1/4-1/2** **1882** **Lower**	**MEGHER PROPERTY** **3070 LOUIS RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese**	**S101303799** **N/A**

CORTESE:
Reg By: LTNKA
Reg Id: 43-0879
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0879	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

MEGHER PROPERTY (Continued) **S101303799**

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 2500 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported

MEGHER PROPERTY (Continued) **S101303799**

Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

G31 **WNW** **1/4-1/2** **1900** **Higher**	**DAN RAYMANN (OWNER OF REAL PRO** **2520 MIDDLEFIELD ROAD** **MOUNTAIN VIEW, CA 37408**	**UST**	**U001560137** **N/A**

State UST:

Facility ID:	68339		
Tank Num:	1	Container Num:	1
Tank Capacity:	7000	Year Installed:	1970
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	X centimeters
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(615) 756-5770
Total Tanks:	3	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	68339		
Tank Num:	2	Container Num:	2
Tank Capacity:	7000	Year Installed:	1970
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(615) 756-5770
Total Tanks:	3	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

DAN RAYMANN (OWNER OF REAL PRO (Continued) **U001560137**

Facility ID:	68339		
Tank Num:	3	Container Num:	3
Tank Capacity:	7000	Year Installed:	1970
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(615) 756-5770
Total Tanks:	3	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

G32 **WNW** **1/4-1/2** **2041** **Higher**	**FRANCISCO VAQUEZ** **2575 MIDDLEFIELD RD # A** **REDWOOD CITY, CA 94063**	**Ca. BI**	**S102268915** **N/A**

SAN MATEO BI:

Region:	SAN MATEO	Program Number:	Not reported

---

33 **SW** **1/4-1/2** **2459** **Higher**	**2898 SOUTH COURT** **PALO ALTO, CA 94303**	**CHMIRS**	**S100221601** **N/A**

CHMIRS:

OES Control Number:	9099588	DOT ID:	1203
DOT Hazard Class:	Flammable liquid		
Chemical Name:	GASOLINE		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	0
Environmental Contamination:	Ground	Property Use:	Residential
Incident Date:	05-OCT-90	Date Completed:	05-OCT-90

H34 **East** **1/4-1/2** **2492** **Lower**	**CHABAD OF THE GREATER SOUTH B** **3070 LOUIS RD** **PALO ALTO, CA 94303**	**LUST**	**S103472955** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	11/21/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	01/21/1997	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	04/01/1985

LUST Region 2:

File Number:	43-0879	Lat/Long:	37.435228 / -122.11923

CHABAD OF THE GREATER SOUTH B (Continued) **S103472955**

Region:	2		
Entered Date:	26-JUN-89	Last Review:	11/21/1997
Correspondence:	19-SEP-90	Report Date:	04/01/1985
Case Number:	06S2W06Q01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	04/01/1985
How Stopped:	Close Tank	Stopped Date:	04/01/1985
Leak Source:	Tank	Leak Cause:	Structure Failure

Facility Status: Pollution characterization
Notify: 0
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: 2500
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: 28
Maximum MTBE: 47
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: Not reported
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
- Leak Confirmed: Not reported
- Workplan Submitted: Not reported
- Assessment Underway: Not reported
- Pollution Characterization: 21-JAN-97
- Corrective Action Plan: Not reported
- Enforcement Action Date: Not reported
- Remediation Underway: Not reported
- Monitoring Begun: Not reported
- Case Closed: Not reported

Abatement: No Action Taken
Comments: AKA CHABAD OF THE GREATER S BAY.

H35 **East** **1/4-1/2** **2492** **Lower**	**CHABAD OF THE GREATER S BAY** **3070 LOUIS RD** **PALO ALTO, CA**	**LUST**	**S103474230** **N/A**

CHABAD OF THE GREATER S BAY (Continued) **S103474230**

LUST Region SC:

Facility ID:	06S2W06Q01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	0211		

36
NNW
1/4-1/2
2497
Higher

1X BRANDON BAILEY
840 WARREN WAY
PALO ALTO, CA 00000

HAZNET **S100925749**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAC000858792	Tepaid:	CAL000027741
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	105
Tsd Name:	CALIFORNIA ASBESTOS MONOFILL		
Tsd Address:	O'BYRNES FERRY RD COPPEROPOLIS		
Tsd County	Calaveras		
Mailing Address:	Not reported		
Category:	151		
Disposal Method:	D80		

37
ESE
1/2-1
2982
Lower

YOUNG MENS CHRISTIAN ASSOCIATION
3412 ROSS ROAD
PALO ALTO, CA 94303

HAZNET **S102792554**
N/A

38
SE
1/2-1
3070
Higher

QUIK STOP MARKET #59
3401 MIDDLEFIELD RD
MENLO PARK, CA 94025

Ca. FID **S101594068**
N/A

FID:

Facility ID:	41004905	Regulate ID:	Not reported
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	Not reported
Mail To:	Not reported P O BOX MENLO PARK, CA 94025		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

I39
West
1/2-1
3360
Higher

1X 2388 WAVERLY AVE.
2388 WAVERLY AVE.
PALO ALTO, CA 94301

HAZNET **S100849028**
N/A

1X 2388 WAVERLY AVE. (Continued) **S100849028**

HAZNET:

Year:	Not reported		
Gepaid:	CAC000835816	Tepaid:	CAD004771168
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	27
Tsd Name:	H & H SHIP SERVICE CO		
Tsd Address:	220 CHINA BASIN ST SAN FRANCISCO		
Tsd County	San Francisco		
Mailing Address:	Not reported		
Category:	512		
Disposal Method:	R01		

Year:	93		
Gepaid:	CAC000835816	Tepaid:	CAD004771168
Contact:	SUSAN PARSONS PRESIDENT	Telephone:	(415) 543-4835
Gen County:	Santa Clara	Tons:	0.27
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Francisco		
Mailing Address:	220 CHINA BASIN ST SAN FRANCISCO, CA 94107		
Category:	512		
Disposal Method:	Not reported		

J40
WSW
1/2-1
3364
Higher

ZZONTA
2680 RAMONA
PALO ALTO, CA 94306

UST **U001595974**
N/A

State UST:

Facility ID:	46598		
Tank Num:	1	Container Num:	#1
Tank Capacity:	500	Year Installed:	1976
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	Not reported	Telephone:	(415) 324-1446
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	HOME

J41
WSW
1/2-1
3364
Higher

ZZONTA
2680 RAMONA
PALO ALTO, CA 94306

Ca. FID **S101623444**
N/A

I42
West
1/2-1
3404
Higher

SNELL RESIDENCE
2388 WAVERLEY ST
PALO ALTO, CA

S Bay Reg. 2 **S101303822**
LUST **N/A**

SNELL RESIDENCE (Continued) **S101303822**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Misc. Motor Vehicle Fuels		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	04/08/1993	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	03/30/1995	Release Date:	06/21/1993

LUST Region 2:

File Number:	43-0795	Lat/Long:	Not reported
Region:	2		
Entered Date:	08-APR-93	Last Review:	04/08/1993
Correspondence:	30-MAR-95	Report Date:	06/21/1993
Case Number:	06S2W08J04	Staff Initial:	CTH
How Discovered:	Not reported	Discovered Date:	Not reported
How Stopped:	Not reported	Stopped Date:	Not reported
Leak Source:	Not reported	Leak Cause:	Not reported
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Misc. Motor Vehicle Fuels
Secondary Substance:	Diesel
Maximum Soil Concentration:	7100
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	Yes
Interim Remediation Date:	21-JUN-93
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	Not reported
Enforcement Date:	Not reported
Responsible Party Search:	Not reported
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported

SNELL RESIDENCE (Continued) S101303822

Assessment Underway: Not reported
Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 30-MAR-95
Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 5/17/96 CONTROL NO 120-057 SRC 0904707 057

LUST Region SC:

Facility ID:	06S3W01Q01	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	3/30/95
Transfer Date:	Not reported	Entry Date:	4/8/93
Case Rank:	S221		

South Bay Region 2:

Facility ID:	43-0795	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: Diesel
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 7100 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported

SNELL RESIDENCE (Continued) **S101303822**

Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

43
SSW
1/2-1
3467
Higher

1X PALO ALTO HOUSING CORP
3020 EMERSON
PALO ALTO, CA 00000

HAZNET **S100852156**
N/A

1X PALO ALTO HOUSING CORP (Continued) **S100852156**

HAZNET:

Year:	Not reported		
Gepaid:	CAC000837424	Tepaid:	CAT080010101
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	17
Tsd Name:	APPROPRIATE TECHNOLOGIES II INC		
Tsd Address:	1700 MAXWELL RD CHULA VISTA		
Tsd County	San Diego		
Mailing Address:	Not reported		
Category:	331		
Disposal Method:	H01		

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44 **East** **1/2-1** **3794** **Lower**	**3303 THOMAS DR** **3303 THOMAS DR** **PALO ALTO, CA 94303**	**ERNS**	**94367652** **N/A**

K45 **WNW** **1/2-1** **3811** **Higher**	**MCOMBER RESIDENCE** **2175 COWPER ST** **PALO ALTO, CA**	**LUST**	**S103474349** **N/A**

LUST Region SC:

Facility ID:	06S3W01Q02	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Linda Dorn	Closed Date:	6/18/96
Transfer Date:	Not reported	Entry Date:	6/21/96
Case Rank:	O-11		

K46 **WNW** **1/2-1** **3811** **Higher**	**MCOMBER PROPERTY** **2175 COWPER ST** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S102433230** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Diesel		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	06/21/1996	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	06/18/1996	Release Date:	05/17/1996

LUST Region 2:

File Number:	43-2124	Lat/Long:	Not reported
Region:	2		
Entered Date:	21-JUN-96	Last Review:	06/21/1996

MCOMBER PROPERTY (Continued) S102433230

Correspondence: 18-JUN-96 Report Date: 05/17/1996
Case Number: 06S2W01Q02 Staff Initial: CTH
How Discovered: Other Means Discovered Date: 05/14/1996
How Stopped: Remove Contents Stopped Date: 03/09/1996
Leak Source: Unknown Leak Cause: Unknown
Facility Status: Signed off, remedial action completed or deemed unnecessary
Notify: Not reported
Update Status: File archived
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Diesel
Secondary Substance: Not reported
Maximum Soil Concentration: 21
Maximum Groundwater Impact: 2000
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: 1
Nuber of Wells: Not reported
Depth to Groundwater: 11
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: Yes
Interim Remediation Date: 09-APR-96
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Not reported
Funding: Not reported
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: 18-JUN-96
Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 11/1/96 CONTROL NO 120-124 SRC 0904774 124

South Bay Region 2:
Facility ID: 43-2124 Staff: Not reported
Case Number: Not reported File Number: Not reported
Last Update: Not reported Case Type: Not reported
RWQCB Initials: Not reported EPA Contact: Not reported
DOHS Initials: Not reported Map Number: Not reported
Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Diesel
Secondary Substance Spilled: NOT REPORTED

MCOMBER PROPERTY (Continued) **S102433230**

Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	11 (Feet)
Maximum Soil Concentration of Contaminates:	21 (parts per million)
Max Grndwater Concentration of Contaminates:	2000 (parts per billion)
Benzene:	0
Maximum Benzene:	1
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported

MCOMBER PROPERTY (Continued) **S102433230**

Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

47
WNW
1/2-1
3877
Higher

FAIR OAKS APARTMENTS
555 E WASHINGTON AVE
SUNNYVALE, CA

S Bay Reg. 2 **S100235735**
N/A

South Bay Region 2:

Facility ID:	43-0556	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Other ground water or surface water is affected or threatened		
Lead:	Local Agency (Santa Clara Valley Water District		
Facility Status:	Not reported		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	9
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Diesel
Secondary Substance Spilled:	Mineral Spirits
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported

FAIR OAKS APARTMENTS (Continued) **S100235735**

Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	6200 (parts per million)
Max Grndwater Concentration of Contaminates:	99999999 (parts per billion)
Benzene:	0
Maximum Benzene:	-1
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation: Not reported

FAIR OAKS APARTMENTS (Continued) **S100235735**

Characterization Not reported
Comments Not reported

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
48 **NNW** **1/2-1** **3905** **Higher**	**ECOLE FRANCO-AMERICAINE** **870 NORTH CALIFORNIA** **PALO ALTO, CA 94303**	**FINDS**	**1000727113** **C09#09-C2017**

FINDS:
Other Pertinent Environmental Activity Identified at Site:
National Compliance Database (NCDB)

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
L49 **SW** **1/2-1** **4072** **Higher**	**PARK AVENUE MOTORS** **3290 PARK BLVD** **PALO ALTO, CA 94306**	**HAZNET**	**S100941891** **N/A**

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
L50 **SW** **1/2-1** **4072** **Higher**	**PARK AVENUE MOTORS** **3290 PARK BLVD** **PALO ALTO, CA 94306**	**RCRIS-SQG** **FINDS** **UST** **Ca. FID** **HAZNET**	**1000265922** **CAD063548655**

RCRIS:

Owner:	KARL VAN KEMPER (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (415) 494-0311
Record Date:	09/01/1996
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

HAZNET:

Year:	Not reported		
Gepaid:	CAD063548655	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	84
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	R01		

PARK AVENUE MOTORS (Continued) **1000265922**

FID:

Facility ID:	43002979	Regulate ID:	00059666
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 494-0311
Mail To:	Not reported 3290 PARK BLVD PALO ALTO, CA 94306		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

State UST:

Facility ID:	59666		
Tank Num:	1	Container Num:	1
Tank Capacity:	500	Year Installed:	1973
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	KARL VAN KEMPEN	Telephone:	(415) 494-0311
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	AUTO DEALER

51
WNW
1/2-1
4079
Higher

WILLIAM CHOW
2090 WEBSTER ST.
PALO ALTO, CA 94301

HAZNET **S102806026**
N/A

L52
SW
1/2-1
4083
Higher

BARRON PARK AUTO SVC
3241 PARK AVE
PALO ALTO, CA 94306

HAZNET **S100614969**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAL000011972	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	45
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	R01		

53
SW
1/2-1
4100
Higher

PALO ALTO ELECTRIC MOTOR
3197 PARK BLVD
PALO ALTO, CA 94306

HAZNET **S102812462**
N/A

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
54 **West** **1/2-1** **4172** **Higher**	**SHELL** **299 CALIFORNIA AVE** **PALO ALTO, CA 94301**	**LUST**	**S103472946** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Review Date:	10/16/1998	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	04/15/1998

LUST Region 2:

File Number:	43-2247	Lat/Long:	Not reported
Region:	2		
Entered Date:	16-OCT-98	Last Review:	10/16/1998
Correspondence:	21-APR-98	Report Date:	04/15/1998
Case Number:	06S3W12F02	Staff Initial:	CTH
How Discovered:	Not reported	Discovered Date:	Not reported
How Stopped:	Not reported	Stopped Date:	Not reported
Leak Source:	Not reported	Leak Cause:	Not reported
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	New case entered into the LUSTIS database which will be included in the FUELS bi-monthly update		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	Not reported
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	0
Nuber of Wells:	0
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	900
Interim Remediation:	Not reported
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported
Pollution Characterization:	Not reported
Corrective Action Plan:	Not reported

SHELL (Continued) **S103472946**

Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Comments: HV NO MOPNO

M55 **SW** **1/2-1** **4191** **Higher**	**LOCKHEED MISSLES & SPACE CO** **3101 PARK BLVD** **PALO ALTO, CA 94306**	**HAZNET**	**S100939015** **N/A**

M56 **SW** **1/2-1** **4191** **Higher**	**LOCKHEED MISSLES & SPACE CO** **3101 PARK BLVD** **PALO ALTO, CA 94306**	**FINDS** **RCRIS-LQG** **HAZNET**	**1000270369** **CAD981994593**

RCRIS:

Owner: LOCKHEED M&S CO
(415) 555-1212

Contact: JAMES SEAVER
(408) 742-7661

Record Date: 03/24/1996

Classification: Large Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

HAZNET:

Year: Not reported
Gepaid: CAD981994593
Contact: Not reported
Gen County: Not reported
Tsd Name: OIL PROCESS CO (DBA)
Tsd Address: 5756 ALBA ST
LOS ANGELES
Tsd County Los Angeles
Mailing Address: Not reported
Category: 551
Disposal Method: R01
Tepaid: CAD050806850
Telephone: Not reported
Tons: 0

LOCKHEED MISSLES & SPACE CO (Continued) **1000270369**

Year:	Not reported		
Gepaid:	CAD981994593	Tepaid:	NCD000648451
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	0
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	99		
Mailing Address:	Not reported		
Category:	141		
Disposal Method:	H01		

M57
SW
1/2-1
4191
Higher

VANCE BROWN & SONS
3101 PARK BLVD
PALO ALTO, CA

S Bay Reg. 2 **S101303811**
LUST **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Diesel		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	04/24/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	04/11/1997	Release Date:	10/01/1993

LUST Region 2:

File Number:	43-1799	Lat/Long:	37.424732 / -122.135113
Region:	2		
Entered Date:	21-DEC-93	Last Review:	04/24/1997
Correspondence:	18-APR-97	Report Date:	10/01/1993
Case Number:	06S3W12H01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	Not reported
How Stopped:	Close Tank	Stopped Date:	Not reported
Leak Source:	Unknown	Leak Cause:	Unknown
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:.	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Diesel
Secondary Substance:	Not reported
Maximum Soil Concentration:	-1
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported

VANCE BROWN & SONS (Continued) **S101303811**

Depth to Groundwater: 21
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: 11-APR-97
Abatement: No Action Taken
Comments: CLOSED PER SCVWD 4/11/97.

LUST Region SC:

Facility ID:	06S3W12H01	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Linda Dorn	Closed Date:	4/11/97
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O—		

South Bay Region 2:

Facility ID:	43-1799	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 0
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported

VANCE BROWN & SONS (Continued) **S101303811**

Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported

	VANCE BROWN & SONS (Continued)		**S101303811**

Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

58	**FIRE STATION #4**	Ca. FID	**S101630249**
SE	**3600 MIDDLEFIELD**		**N/A**
1/2-1	**PALO ALTO, CA 94305**		
4207			
Higher			

N59	**INTERNATIONAL POWER TECHNOLOGY**	UST	**U001595876**
NE	**2800 WEST BAYSHORE RD**		**N/A**
1/2-1	**PALO ALTO, CA 94303**		
4253			
Lower			

State UST:

Facility ID:	16509		
Tank Num:	1	Container Num:	1
Tank Capacity:	2000	Year Installed:	1984
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	1/4 inches
Leak Detection:	GW Monitoring Well		
Contact Name:	JOHN WILLIAMS	Telephone:	(415) 858-1611
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	RESEARCH CO.

N60	**INTERNATIONAL POWER TECHNOLOGY**	Ca. FID	**S101623400**
NE	**2800 W BAYSHORE RD**		**N/A**
1/2-1	**PALO ALTO, CA 94303**		
4253			
Lower			

M61	**STANFORD BMW**	RCRIS-SQG	**1000314834**
SW	**3045 PARK BLVD**	FINDS	**CAD981992639**
1/2-1	**PALO ATLO, CA 94306**	HAZNET	
4261			
Higher			

STANFORD BMW (Continued) **1000314834**

RCRIS:

Owner:	H JAEHNICHEN (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (415) 324-4488
Record Date:	02/24/1987
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

HAZNET:

Year:	Not reported		
Gepaid:	CAD981992639	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	317
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	R01		

M62 **SW** **1/2-1** **4268** **Higher**	**PARK AUTOMOTIVE** **3040 PARK BLVD** **PALO ALTO, CA 94306**	**HAZNET**	**S100941888** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAL930295449	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	22
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	D99		

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63 **WNW** **1/2-1** **4289** **Higher**	**SABIN RESIDENCE** **491 SANTA RITA AVE** **PALO ALTO, CA**	**S Bay Reg. 2** **HAZNET** **LUST**	**S102436209** **N/A**

SABIN RESIDENCE (Continued) **S102436209**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Diesel		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	02/14/1995	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	06/27/1996	Release Date:	07/06/1994

LUST Region 2:

File Number:	43-2133	Lat/Long:	37.435718 / -122.138881
Region:	2		
Entered Date:	14-FEB-95	Last Review:	02/14/1995
Correspondence:	10-JUL-96	Report Date:	07/06/1994
Case Number:	06S3W01K01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	03/31/1994
How Stopped:	Close Tank	Stopped Date:	03/31/1994
Leak Source:	Unknown	Leak Cause:	Unknown
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Moderate Priority Site Water resource other than currently used drinking water is or may be impacted. Soil contamination currently exists, requiring additional investigation of ground water and/or soil to review threat an re-prioritize at sites with designated beneficial uses.		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Diesel
Secondary Substance:	Not reported
Maximum Soil Concentration:	260
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	0
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	Yes
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported

SABIN RESIDENCE (Continued) S102436209

Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
- Leak Confirmed: Not reported
- Workplan Submitted: Not reported
- Assessment Underway: Not reported
- Pollution Characterization: Not reported
- Corrective Action Plan: Not reported
- Enforcement Action Date: Not reported
- Remediation Underway: Not reported
- Monitoring Begun: Not reported
- Case Closed: 27-JUN-96

Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 11/1/96 CONTROL NO 120-124 SRC 0904774 124

LUST Region SC:

Facility ID:	06S3W01K01	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	6/27/96
Transfer Date:	Not reported	Entry Date:	2/14/95
Case Rank:	S121		

South Bay Region 2:

Facility ID:	43-2133	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	9
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Diesel
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	260 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0

SABIN RESIDENCE (Continued) **S102436209**

Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
64 **South** **1/2-1** **4309** **Higher**	**ROBERT D UPTON DDS** **3303 ALMA ST** **PALO ALTO, CA 94306**	**HAZNET**	**S102813173** **N/A**
O65 **SE** **1/2-1** **4347** **Higher**	**CITY PALO ALTO** **3600 MIDDLEFIELD RD** **PALO ALTO, CA 94303**	**HAZNET**	**S102804438** **N/A**
O66 **SE** **1/2-1** **4347** **Higher**	**CITY OF PALO ALTO FIRE STATION #4** **3600 MIDDLEFIELD RD** **PALO ALTO, CA 94303**	**HAZNET**	**S102799387** **N/A**
P67 **SW** **1/2-1** **4408** **Higher**	**ARTS BODY SHOP** **280 LAMBERT AVE** **PALO ALTO, CA 94306**	**HAZNET**	**1000374089** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAD063539217	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	76
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	214		
Disposal Method:	R01		

P68 **SW** **1/2-1** **4408** **Higher**	**ARTS BODY SHOP** **280 LAMBERT AVE** **PALO ALTO, CA 94306**	**HAZNET**	**S100930078** **N/A**
Q69 **WSW** **1/2-1** **4432** **Higher**	**AKINS BODY SHOP INC** **2901 PARK BLVD** **PALO ALTO, CA 94306**	**RCRIS-SQG** **FINDS** **S Bay Reg. 2** **HAZNET** **CA SLIC**	**1000319009** **CAD064719859**

AKINS BODY SHOP INC (Continued) **1000319009**

RCRIS:

Owner:	BILL RUPP (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (405) 321-1460
Record Date:	02/20/1986
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

HAZNET:

Year:	Not reported		
Gepaid:	CAD064719859	Tepaid:	CAT000613893
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	104
Tsd Name:	SAFETY-KLEEN CORP (7-088-06)		
Tsd Address:	10625 HICKSON ST#A EL MONTE		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	212		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAD064719859	Tepaid:	CAT000646117
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	21
Tsd Name:	CHEMICAL WASTE MGMT INC/KETTLEMANHILLS		
Tsd Address:	KETTLEMAN N DOME LDFL HWY 41 KETTLEMAN CITY		
Tsd County	Kings		
Mailing Address:	Not reported		
Category:	212		
Disposal Method:	UNK		

South Bay Region 2:

Facility ID:	43S0773	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	INACTIVE		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No

AKINS BODY SHOP INC (Continued) **1000319009**

Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported

AKINS BODY SHOP INC (Continued) **1000319009**

Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	soil sampling conducted
Comments	Site impacted by HP plume. low priority. lead and copper in surface soils. last update 1981

AKINS BODY SHOP INC (Continued) **1000319009**

SLIC Region 2:
Facility ID: 43S0773
Region: 2
Facility Status: Inactive

R70
East
1/2-1
4441
Lower

SPACE SYSTEMS/LORAL
1050 E MEADOW CIRCLE BLDG 21
PALO ALTO, CA 94303

HAZNET **S102814261**
N/A

Q71
WSW
1/2-1
4446
Higher

ARCO SECURITIES INC
2891 PARK BLVD
PALO ALTO, CA 90000

HAZNET **S100929976**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAC000917256	Tepaid:	CAD004771168
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	27
Tsd Name:	H & H SHIP SERVICE CO		
Tsd Address:	220 CHINA BASIN ST SAN FRANCISCO		
Tsd County	San Francisco		
Mailing Address:	Not reported		
Category:	512		
Disposal Method:	R01		

Year:	93		
Gepaid:	CAC000917256	Tepaid:	CAD004771168
Contact:	SUSAN PARSONS PRESIDENT	Telephone:	(415) 543-4835
Gen County:	Santa Clara	Tons:	0.54
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Francisco		
Mailing Address:	220 CHINA BASIN ST SAN FRANCISCO, CA 94107		
Category:	512		
Disposal Method:	R01		

Q72
WSW
1/2-1
4446
Higher

BIX
2891 PARK BLVD
PALO ALTO, CA 94306

RCRIS-SQG **1000100224**
FINDS **CAD981394265**

BIX (Continued) **1000100224**

RCRIS:

Owner:	RICHARD DENNISON (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (416) 321-1817
Record Date:	09/01/1996
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

S73	**PACIFIC BELL**	**RCRIS-SQG**	**1000251157**
SW	**3350 BIRCH STREET**	**FINDS**	**CAT080019896**
1/2-1	**PALO ALTO, CA 94306**	**UST**	
4471		**Ca. FID**	
Higher		**HAZNET**	

RCRIS:

Owner:	THE PACIFIC TELEPHONE AND TELEGRAPH CO (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (408) 491-6029
Record Date:	09/01/1996
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

FID:

Facility ID:	43010954	Regulate ID:	00036909
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 542-6758
Mail To:	Not reported 370 003RD ST PALO ALTO, CA 94306		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

State UST:

Facility ID:	36909		
Tank Num:	1	Container Num:	D-69-10K
Tank Capacity:	10000	Year Installed:	1969
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	E.J. KOEHLER	Telephone:	(415) 542-6758
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	SIC 4800

PACIFIC BELL (Continued) **1000251157**

Facility ID:	36909		
Tank Num:	2	Container Num:	1
Tank Capacity:	10000	Year Installed:	1969
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	E.J. KOEHLER	Telephone:	(415) 542-6758
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	SIC 4800

S74
SW
1/2-1
4471
Higher

PACIFIC TELEPHONE AND TELEGRAPH CO
3350 BIRCH STREET
PALO ALTO, CA 94306

HAZNET **S100941715** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAT080019896	Tepaid:	CAD009466392
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	500
Tsd Name:	ERICKSON TRUCKING INC		
Tsd Address:	255 PARR BLVD RICHMOND		
Tsd County	Contra Costa		
Mailing Address:	Not reported		
Category:	512		
Disposal Method:	UNK		

Year:	Not reported		
Gepaid:	CAT080019896	Tepaid:	CAL000027741
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	84
Tsd Name:	CALIFORNIA ASBESTOS MONOFILL		
Tsd Address:	O'BYRNES FERRY RD COPPEROPOLIS		
Tsd County	Calaveras		
Mailing Address:	Not reported		
Category:	151		
Disposal Method:	D80		

P75
SW
1/2-1
4487
Higher

HELMINGS AUTO REPAIR
300 LAMBERT AVE
PALO ALTO, CA 94306

RCRIS-SQG
FINDS
HAZNET

1000300043
CAD982496853

HELMINGS AUTO REPAIR (Continued) **1000300043**

RCRIS:

Owner: HELMING ROBERT
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 494-0908

Record Date: 05/16/1990

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

HAZNET:

Year:	Not reported		
Gepaid:	CAD982496853	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	123
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	R01		

T76 **ENE** **1/2-1** **4504** **Lower**	**COHERENT MEDICAL GROUP** **3270 W BAYSHORE RD** **PALO ALTO, CA 94303**	**RCRIS-SQG** **FINDS** **HAZNET**	**1000214714** **CAD102766847**

RCRIS:

Owner: COHERENT INC
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 858-7463

Record Date: 09/01/1996

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

COHERENT MEDICAL GROUP (Continued) **1000214714**

HAZNET:
Year: Not reported
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 88
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 214
Disposal Method: D99

Year: Not reported
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 154
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 343
Disposal Method: D99

Year: Not reported
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 67
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 352
Disposal Method: D99

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.22
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: Not reported
Disposal Method: Not reported

COHERENT MEDICAL GROUP (Continued) **1000214714**

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.66
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: Not reported
Disposal Method: D99

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.22
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: ***
Disposal Method: Not reported

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.44
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: 214
Disposal Method: Not reported

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.88
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: 214
Disposal Method: D99

COHERENT MEDICAL GROUP (Continued) **1000214714**

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.44
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: 343
Disposal Method: Not reported

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.88
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: 343
Disposal Method: D99

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.30
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: 352
Disposal Method: Not reported

Year: 93
Gepaid: CAD102766847 Tepaid: CAD059494310
Contact: SUE VEDANTHAM ENVIRON MANAGERTelephone: (408) 451-5000
Gen County: Santa Clara Tons: 0.67
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Santa Clara
Mailing Address: 1040 COMMERCIAL ST STE 109
SAN JOSE, CA 95112
Category: 352
Disposal Method: D99

U77 **PALO ALTO CITY OF DEPT OF UTIL** **FINDS** **1000324040**
NE **3201 E BAYSHORE** **RCRIS-LQG** **CAT000604017**
1/2-1 **PALO ALTO, CA 94303** **CERC-NFRAP**
4510
Lower

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported Federal Facility: Not reported
Ownership Status: Unknown NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY Completed: 19790401

PALO ALTO CITY OF DEPT OF UTIL (Continued) **1000324040**

Assessment: PRELIMINARY ASSESSMENT Completed: 19870101

CERCLIS-NFRAP Alias Name(s):
CITY OF PALO ALTO

RCRIS:

Owner: CITY OF PALO ALTO
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 329-2432

Record Date: 09/01/1996

Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	5698.64	D002	614.65
D006	3836.66	D007	11422.80
D008	13286.46	D009	133.00
D011	623.00	D018	6415.50
D035	656.80	D039	1357.87
D040	1357.87		

Used Oil Recyc: No

Violation Status: Violation information exist

There are 1 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	01/06/1984

U78 **NE** **1/2-1** **4510** **Lower**	**MUNICIPAL SERVICE CENTER** **3201 E. BAYSHORE ROAD** **PALO ALTO, CA 94303**	UST	**U001595881** **N/A**

State UST:

Facility ID:	28135		
Tank Num:	1	Container Num:	1
Tank Capacity:	400	Year Installed:	1970
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

MUNICIPAL SERVICE CENTER (Continued) **U001595881**

Facility ID:	28135		
Tank Num:	7	Container Num:	7
Tank Capacity:	550	Year Installed:	1970
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

Facility ID:	28135		
Tank Num:	8	Container Num:	8
Tank Capacity:	550	Year Installed:	1970
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

Facility ID:	28135		
Tank Num:	9	Container Num:	9
Tank Capacity:	550	Year Installed:	1970
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

Facility ID:	28135		
Tank Num:	10	Container Num:	10
Tank Capacity:	550	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

Facility ID:	28135		
Tank Num:	11	Container Num:	11
Tank Capacity:	90	Year Installed:	Not reported
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

MUNICIPAL SERVICE CENTER (Continued) **U001595881**

Facility ID:	28135		
Tank Num:	12	Container Num:	12
Tank Capacity:	1825	Year Installed:	Not reported
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

Facility ID:	28135		
Tank Num:	13	Container Num:	1
Tank Capacity:	250	Year Installed:	1967
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	TED KREBS	Telephone:	(415) 329-2335
Total Tanks:	13	Region:	Not reported
Facility Type:	2	Other Type:	CITY CORP. YARD

U79 **NE** **1/2-1** **4510** **Lower**	**CITY OF PALO ALTO REFUSE DISPOSAL SITE** **3201 E BAYSHORE RD** **PALO ALTO, CA**	**SWF/LF**	**S102362524** **N/A**

LF:

Facility ID:	43-AM-0001
Operator:	CITY OF PALO ALTO
Operator Addr:	P.O. BOX 10250 PALO ALTO, CA 94303
Operator Phone:	(650) 329-2113
Owner:	CITY OF PALO ALTO
Owner Address:	P.O. BOX 10250 PALO ALTO, CA 94303
Owner's Tel:	(650) 329-2113
Activity:	Solid Waste Landfill
Operator's Status:	Active
Regulation Status:	Permitted
Region:	STATE
Lat/Long:	37.44387 / -122.14875
Waste Accepted:	Construction/demolition; Industrial; Mixed municipal
Surrounding Land:	Not reported
Report of Facility Info Date:	08/1977
Report of Facility Info Amendment:	Not reported
Permitted Throughput with Units:	200 Tons/day
Actual Throughput with Units:	195 Tons/day
Actual Capacity with Units:	Not reported
Permited Capacity with Units:	Not reported
Remaining Capacity with Units:	Not reported
Permitted Total Acreage:	137.03
Actual Total Acreage:	137.00
Permitted Disposal Acreage:	116.00
Actual Disposal Acreage:	116.00
Inspection Frequency:	Monthly

U80 **NE** **1/2-1** **4510** **Lower**	**MUNICIPAL SERVICE CENTER** **3201 E BAYSHORE RD** **PALO ALTO, CA 94303**	**Ca. FID** **S Bay Reg. 2** **HAZNET** **CA SLIC**	**S101630246** **N/A**

South Bay Region 2:

Facility ID:	43S0389	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	INACTIVE		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported

MUNICIPAL SERVICE CENTER (Continued) **S101630246**

Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

MUNICIPAL SERVICE CENTER (Continued) **S101630246**

SLIC Region 2:
Facility ID: 43S0389
Region: 2
Facility Status: Inactive

U81
NE
1/2-1
4510
Lower

PALO ALTO CITY OF/DEPT OF UTILITIES
3201 E BAYSHORE BLVD
PALO ALTO, CA 94303

HAZNET **S100870050**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	AZD982465855
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	579
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	00		
Mailing Address:	Not reported		
Category:	Not reported		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	AZD982465855
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	280
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	00		
Mailing Address:	Not reported		
Category:	261		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	AZD982465866
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	7678
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	99		
Mailing Address:	Not reported		
Category:	Not reported		
Disposal Method:	R01		

PALO ALTO CITY OF/DEPT OF UTILITIES (Continued) **S100870050**

Year: Not reported
Gepaid: CAT000604017
Contact: Not reported
Gen County: Not reported
Tsd Name: UNKNOWN
Tsd Address: Not reported
Tsd County 99
Mailing Address: Not reported
Category: Not reported
Disposal Method: UNK
Tepaid: AZD982465866
Telephone: Not reported
Tons: 769

Year: Not reported
Gepaid: CAT000604017
Contact: Not reported
Gen County: Not reported
Tsd Name: UNKNOWN
Tsd Address: Not reported
Tsd County 99
Mailing Address: Not reported
Category: 261
Disposal Method: R01
Tepaid: AZD982465866
Telephone: Not reported
Tons: 1099

Year: Not reported
Gepaid: CAT000604017
Contact: Not reported
Gen County: Not reported
Tsd Name: UNKNOWN
Tsd Address: Not reported
Tsd County 99
Mailing Address: Not reported
Category: 261
Disposal Method: UNK
Tepaid: AZD982465866
Telephone: Not reported
Tons: 725

Year: Not reported
Gepaid: CAT000604017
Contact: Not reported
Gen County: Not reported
Tsd Name: UNKNOWN
Tsd Address: Not reported
Tsd County 99
Mailing Address: Not reported
Category: 731
Disposal Method: UNK
Tepaid: AZD982465866
Telephone: Not reported
Tons: 100

PALO ALTO CITY OF/DEPT OF UTILITIES (Continued) **S100870050**

Year: Not reported
Gepaid: CAT000604017
Tepaid: CAD009452657
Contact: Not reported
Telephone: Not reported
Gen County: Not reported
Tons: 386
Tsd Name: ROMIC CHEMICAL CORP
Tsd Address: 2081 BAY RD
PALO ALTO
Tsd County Santa Clara
Mailing Address: Not reported
Category: 223
Disposal Method: D99

Year: Not reported
Gepaid: CAT000604017
Tepaid: CAD009452657
Contact: Not reported
Telephone: Not reported
Gen County: Not reported
Tons: 16
Tsd Name: ROMIC CHEMICAL CORP
Tsd Address: 2081 BAY RD
PALO ALTO
Tsd County Santa Clara
Mailing Address: Not reported
Category: 343
Disposal Method: D99

Year: Not reported
Gepaid: CAT000604017
Tepaid: CAD009452657
Contact: Not reported
Telephone: Not reported
Gen County: Not reported
Tons: 129
Tsd Name: ROMIC CHEMICAL CORP
Tsd Address: 2081 BAY RD
PALO ALTO
Tsd County Santa Clara
Mailing Address: Not reported
Category: 343
Disposal Method: R01

Year: Not reported
Gepaid: CAT000604017
Tepaid: CAD059494310
Contact: Not reported
Telephone: Not reported
Gen County: Not reported
Tons: 1
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 141
Disposal Method: H01

PALO ALTO CITY OF/DEPT OF UTILITIES (Continued) **S100870050**

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	11
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	331		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	2
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	331		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	188
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	540
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	352		
Disposal Method:	D99		

PALO ALTO CITY OF/DEPT OF UTILITIES (Continued) **S100870050**

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	170
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	352		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	7
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	551		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD083166728
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	141
Tsd Name:	REFINERIES SERVICE/FRESNO ROUTE		
Tsd Address:	13331 N HWY 33 PATTERSON		
Tsd County	Stanislaus		
Mailing Address:	Not reported		
Category:	223		
Disposal Method:	R01		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	CAD982446890
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	4
Tsd Name:	EVERGREEN OIL INC RIPON		
Tsd Address:	777 S LOCUST AVE RIPON		
Tsd County	San Joaquin		
Mailing Address:	Not reported		
Category:	221		
Disposal Method:	H01		

PALO ALTO CITY OF/DEPT OF UTILITIES (Continued) **S100870050**

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	UTD991301748
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	24
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	99		
Mailing Address:	Not reported		
Category:	Not reported		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	UTD991301748
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	36
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	99		
Mailing Address:	Not reported		
Category:	261		
Disposal Method:	D80		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	UTD991301748
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	175
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	99		
Mailing Address:	Not reported		
Category:	261		
Disposal Method:	T01		

Year:	Not reported		
Gepaid:	CAT000604017	Tepaid:	UTD991301748
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	181
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	99		
Mailing Address:	Not reported		
Category:	731		
Disposal Method:	H01		

T82 **ENE** **1/2-1** **4529** **Lower**	**QUANTEL** **3290 W BAYSHORE** **PALO ALTO, CA 94303**	**RCRIS-SQG** **FINDS**	**1000322145** **CAD980888051**

QUANTEL (Continued) **1000322145**

RCRIS:

Owner:	NOT REQUIRED (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (415) 856-6226
Record Date:	09/01/1996
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

V83 **WSW** **1/2-1** **4565** **Higher**	**HOHBACK** **200 PAGE MILL RD** **PALO ALTO, CA**	**LUST**	**S103474369** **N/A**

LUST Region SC:

Facility ID:	06S3W12G01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Adele Shepherd	Closed Date:	Not reported
Transfer Date:	2/6/92	Entry Date:	Not reported
Case Rank:	O421		

V84 **WSW** **1/2-1** **4580** **Higher**	**PACIFIC READY MIX INC** **2785 PARK BLVD** **PALO ALTO, CA 94306**	**UST**	**U001595963** **N/A**

State UST:

Facility ID:	10312		
Tank Num:	1	Container Num:	1
Tank Capacity:	8000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor		
Contact Name:	KEN GARINO	Telephone:	(415) 323-0224
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	READY MIX CONCRETE

Facility ID:	10312		
Tank Num:	2	Container Num:	2
Tank Capacity:	1000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor		
Contact Name:	KEN GARINO	Telephone:	(415) 323-0224
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	READY MIX CONCRETE

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
V85 WSW 1/2-1 4580 Higher	**1X RMC LONESTAR 2785 PARK STREET PALO ALTO, CA 94306**	**HAZNET**	**S100927827 N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAC000800768	Tepaid:	CAD004771168
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	50
Tsd Name:	H & H SHIP SERVICE CO		
Tsd Address:	220 CHINA BASIN ST SAN FRANCISCO		
Tsd County	San Francisco		
Mailing Address:	Not reported		
Category:	512		
Disposal Method:	R01		

Year:	Not reported		
Gepaid:	CAC000800768	Tepaid:	CAT080010101
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	20
Tsd Name:	APPROPRIATE TECHNOLOGIES II INC		
Tsd Address:	1700 MAXWELL RD CHULA VISTA		
Tsd County	San Diego		
Mailing Address:	Not reported		
Category:	221		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAC000800768	Tepaid:	CAT080010101
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	1876
Tsd Name:	APPROPRIATE TECHNOLOGIES II INC		
Tsd Address:	1700 MAXWELL RD CHULA VISTA		
Tsd County	San Diego		
Mailing Address:	Not reported		
Category:	331		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAC000800768	Tepaid:	CAT080010101
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	45
Tsd Name:	APPROPRIATE TECHNOLOGIES II INC		
Tsd Address:	1700 MAXWELL RD CHULA VISTA		
Tsd County	San Diego		
Mailing Address:	Not reported		
Category:	611		
Disposal Method:	H01		

1X RMC LONESTAR (Continued) **S100927827**

Year:	93		
Gepaid:	CAC000800768	Tepaid:	CAD004771168
Contact:	SUSAN PARSONS PRESIDENT	Telephone:	(415) 543-4835
Gen County:	San Mateo	Tons:	0.50
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Francisco		
Mailing Address:	220 CHINA BASIN ST SAN FRANCISCO, CA 94107		
Category:	512		
Disposal Method:	R01		

V86 **WSW** **1/2-1** **4580** **Higher**	**PACIFIC READY MIX INC** **2785 PARK BLVD** **PALO ALTO, CA 94306**	**Ca. FID**	**S101630255** **N/A**

V87 **WSW** **1/2-1** **4623** **Higher**	**OFFICES OF VANCE M. BROWN & SO** **2747 PARK BOULEVARD** **PALO ALTO, CA 94306**	**UST**	**U001595962** **N/A**

State UST:

Facility ID:	10713		
Tank Num:	1	Container Num:	1
Tank Capacity:	550	Year Installed:	1964
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	10OR12 gauge
Leak Detection:	Stock Inventor		
Contact Name:	ALLAN F. BROWN	Telephone:	(415) 321-8432
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	GENERAL CONTRACTORS

Facility ID:	10713		
Tank Num:	2	Container Num:	2
Tank Capacity:	1000	Year Installed:	1977
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	10OR12 gauge
Leak Detection:	Stock Inventor		
Contact Name:	ALLAN F. BROWN	Telephone:	(415) 321-8432
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	GENERAL CONTRACTORS

V88 **WSW** **1/2-1** **4623** **Higher**	**VANCE BROWN & SONS** **2747 PARK BLVD** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S101303810** **N/A**

VANCE BROWN & SONS (Continued) **S101303810**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Replace Supply - provide alternative water supply to affected parties, Replace Supply - provide alternative water supply to affected parties		
Review Date:	02/11/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	02/28/1989
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	02/06/1997	Release Date:	12/09/1988

LUST Region 2:

File Number:	43-1923	Lat/Long:	37.426475 / -122.138588
Region:	2		
Entered Date:	31-MAR-89	Last Review:	02/11/1997
Correspondence:	06-FEB-97	Report Date:	12/09/1988
Case Number:	06S3W12G02	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/09/1988
How Stopped:	Close Tank	Stopped Date:	12/09/1988
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	1700
Maximum Groundwater Impact:	1700
Current Benzene in Groundwater:	-1
Maximum Benzene Concentration:	270
Nuber of Wells:	1
Depth to Groundwater:	21
MTBE Contamination Level:	-1
Maximum MTBE:	Not reported
Interim Remediation:	Yes
Interim Remediation Date:	28-FEB-89
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	28-FEB-89
Pollution Characterization:	Not reported
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported

VANCE BROWN & SONS (Continued) **S101303810**

Monitoring Begun: Not reported
Case Closed: 06-FEB-97
Abatement: Replace Supply - provide alternative water supply to affected parties
Comments: SMS ALSO-SEE JMH FOR FILE - OT (PROXIMITY TO HP/VARIAN PLUME)6/96CLOSED

LUST Region SC:

Facility ID:	06S3W12G02	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	2/6/97
Transfer Date:	7/22/91	Entry Date:	Not reported
Case Rank:	O221		

South Bay Region 2:

Facility ID:	43-1923	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 3
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 22 (Feet)
Maximum Soil Concentration of Contaminates: 2 (parts per million)
Max Grndwater Concentration of Contaminates: 1700 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported

VANCE BROWN & SONS (Continued) **S101303810**

Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

V89 **WSW** **1/2-1** **4623** **Higher**	**VANCE BROWN AND SONS** **PALO ALTO, CA**	**S Bay Reg. 2** **CA SLIC**	**S101542369** **N/A**

South Bay Region 2:

Facility ID:	43S0736	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8254
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		

VANCE BROWN AND SONS (Continued) **S101542369**

Lead: Not reported
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: Yes
Contaminant Concentration Type (1): Soil
Key Contaminant Concentration (1): PETROLEUM HYDROCARBONS
Initial Maximum Concentration (1): 2.2 PPM (parts per billion)
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Soil
Key Contaminant Concentration (2): XYLENES
Initial Maximum Concentration (2): 0.8 PPM (parts per billion)
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): 0
Size Depth (FT): 0
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: Not reported
Total of Extraction Flow Rate: 0.0gpm
Estimated % of Contaminants Contained: NOT APP
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported

VANCE BROWN AND SONS (Continued) **S101542369**

Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

Facility ID:	43S0736	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8254
Last Update:	01/01/91	Case Type:	TK
RWQCB Initials:	HTK	EPA Contact:	NONE
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	ACTIVE		
Discovered Date:	Not reported		

Facility Description:	UNKNOWN
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Soil
Key Contaminant Concentration (1):	PETROLEUM HYDROCARBONS
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Soil
Key Contaminant Concentration (2):	XYLENES
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	.
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	0
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported

VANCE BROWN AND SONS (Continued) **S101542369**

Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: NOT DETERMINED
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: GASOLINE STORAGE TANK
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): YES
Well or Boring Number (1): Not reported
Initial Level Concentration (1): 2.2 PPM (parts per billion)
Current Level Concentration (1): Not reported
Contaminant Concentration (2): YES
Well or Boring Number (2): Not reported
Initial Level Concentration (2): 0.8 PPM (parts per billion)
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: 0
Number of Private Wells: 0
Closure Name: NONE
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: NOT DETERMINED
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: NOT DETER
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): NONE
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported

VANCE BROWN AND SONS (Continued) **S101542369**

Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization SITE INVESTIGATION, NO ACTION.
Comments QUARTERLY MONITORING, VOC IMPACT FROM HP VARIAN PLUME.

SLIC Region 2:
Facility ID: 43S0736
Region: 2
Facility Status: Active

V90
WSW
1/2-1
4623
Higher

OFFICES OF VANCE M. BROWN & SO
2747 PARK BLVD
PALO ALTO, CA 94306

Ca. FID **S101623434** **N/A**

O91
SE
1/2-1
4624
Higher

FIRE STATION #4
3600 MIDDLEFIELD
PALO ALTO, CA 94305

UST **U001595929** **N/A**

State UST:

Facility ID:	24978		
Tank Num:	1	Container Num:	F4-4
Tank Capacity:	550	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	CHIEF MCLAUGHLIN	Telephone:	329-2531
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	FIRE STATION

R92
East
1/2-1
4630
Lower

BATTON PROPERTY
1060 E MEADOW CIR
PALO ALTO, CA

S Bay Reg. 2 **CA SLIC** **S102284323** **N/A**

South Bay Region 2:

Facility ID:	43S0505	Staff:	JRW
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Not reported		
Facility Status:	CLOSED		
Discovered Date:	Not reported		

Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported

BATTON PROPERTY (Continued) **S102284323**

Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported

BATTON PROPERTY (Continued) **S102284323**

Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

BATTON PROPERTY (Continued) **S102284323**

SLIC Region 2:
Facility ID: 43S0505
Region: 2
Facility Status: Closed - No Further Action

V93 **WSW** **1/2-1** **4634** **Higher**	**HOHBACK** **216 PAGE MILL RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **LUST**	**S101309091** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	01/10/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	01/10/1997	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	06/25/1984

LUST Region 2:

File Number:	43-0703	Lat/Long:	37.426136 / -122.138566
Region:	2		
Entered Date:	Not reported	Last Review:	01/10/1997
Correspondence:	28-FEB-91	Report Date:	06/25/1984
Case Number:	06S3W12G01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	06/25/1984
How Stopped:	Close Tank	Stopped Date:	06/25/1984
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	2500
Maximum Groundwater Impact:	Free product in the well
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Not reported
Funding:	Federal

HOHBACK (Continued) **S101309091**

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported
Pollution Characterization:	10-JAN-97
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported
Monitoring Begun:	Not reported
Case Closed:	Not reported

Abatement: No Action Taken
Comments: OT '92;PART OF HP/VARIAN PLUME-SEE HTK-ON HOLD

CORTESE:
Reg By: LTNKA
Reg Id: 43-0703
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0703	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Region Board is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	1
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Gasoline
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	2500 (parts per million)
Max Grndwater Concentration of Contaminates:	99999999 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported

HOHBACK (Continued) **S101309091**

Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

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94 ENE 1/2-1 4646 Lower	**PALO ALTO PLACE** **3350 WEST BAYSHORE** **PALO ALTO, CA 94303**	**UST**	**U001595886** **N/A**

PALO ALTO PLACE (Continued) **U001595886**

State UST:

Facility ID:	29880		
Tank Num:	1	Container Num:	1
Tank Capacity:	0	Year Installed:	1984
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	RICHARD PANIAGUA	Telephone:	(415) 572-8717
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	OFFICE BUILDING

W95 **South** **1/2-1** **4674** **Higher**	**CHEVRON** **3401 ALMA ST** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **LUST**	**S102426836** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Vent Soil - bore holes in soil to allow volatilization of contaminants		
Review Date:	01/10/1990	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	09/15/1984
Pollution Char:	02/19/1991	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	08/31/1989

LUST Region 2:

File Number:	43-0318	Lat/Long:	37.419475 / -122.12449
Region:	2		
Entered Date:	23-JUN-89	Last Review:	01/10/1990
Correspondence:	01-JUL-93	Report Date:	08/31/1989
Case Number:	06S2W07P01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	01/09/1990
How Stopped:	Close Tank	Stopped Date:	01/09/1990
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Waste Oil
Maximum Soil Concentration:	150
Maximum Groundwater Impact:	Free product in the well
Current Benzene in Groundwater:	4000
Maximum Benzene Concentration:	4900
Nuber of Wells:	Not reported
Depth to Groundwater:	13
MTBE Contamination Level:	-3
Maximum MTBE:	9

CHEVRON (Continued) **S102426836**

Interim Remediation: Yes
Interim Remediation Date: 03-APR-91
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: 15-SEP-84
Pollution Characterization: 19-FEB-91
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Dispose (landfill) of soil, Vent Soil insitu or vacuum extraction
Comments: CURRENT MTBE DATE: 7/21/98

CORTESE:
Reg By: LTNKA
Reg Id: 43-0318
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0318	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: Waste Oil
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported

CHEVRON (Continued) **S102426836**

Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	13 (Feet)
Maximum Soil Concentration of Contaminates:	150 (parts per million)
Max Grndwater Concentration of Contaminates:	99999999 (parts per billion)
Benzene:	4000
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

CHEVRON (Continued) **S102426836**

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
W96 **South** **1/2-1** **4674** **Higher**	**96791** **3401 ALMA ST** **PALO ALTO, CA 94306**	**UST**	**U001595940** **N/A**

State UST:

Facility ID:	62916		
Tank Num:	1	Container Num:	1
Tank Capacity:	4000	Year Installed:	1961
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000170 unknown
Leak Detection:	Stock Inventor		
Contact Name:	PENNEL, DENNIS C	Telephone:	(415) 494-1740
Total Tanks:	6	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	62916		
Tank Num:	2	Container Num:	2
Tank Capacity:	4000	Year Installed:	1961
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000170 unknown
Leak Detection:	Stock Inventor		
Contact Name:	PENNEL, DENNIS C	Telephone:	(415) 494-1740
Total Tanks:	6	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	62916		
Tank Num:	3	Container Num:	3
Tank Capacity:	3000	Year Installed:	1961
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000170 unknown
Leak Detection:	Stock Inventor		
Contact Name:	PENNEL, DENNIS C	Telephone:	(415) 494-1740
Total Tanks:	6	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	62916		
Tank Num:	4	Container Num:	4
Tank Capacity:	3000	Year Installed:	1961
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000170 unknown
Leak Detection:	Stock Inventor		
Contact Name:	PENNEL, DENNIS C	Telephone:	(415) 494-1740
Total Tanks:	6	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

96791 (Continued) **U001595940**

Facility ID:	62916		
Tank Num:	5	Container Num:	5
Tank Capacity:	3000	Year Installed:	1961
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	0000170 unknown
Leak Detection:	Stock Inventor		
Contact Name:	PENNEL, DENNIS C	Telephone:	(415) 494-1740
Total Tanks:	6	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	62916		
Tank Num:	6	Container Num:	6
Tank Capacity:	550	Year Installed:	1961
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	0000100 unknown
Leak Detection:	Stock Inventor		
Contact Name:	PENNEL, DENNIS C	Telephone:	(415) 494-1740
Total Tanks:	6	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

W97 **South** **1/2-1** **4674** **Higher**	**96791** **3401 ALMA ST** **PALO ALTO, CA 94306**	**Ca. FID**	**S101623423** **N/A**

W98 **South** **1/2-1** **4674** **Higher**	**CHEVRON #9-6791** **3401 ALMA ST** **PALO ALTO, CA**	**LUST**	**S103474232** **N/A**

LUST Region SC:

Facility ID:	06S2W07P01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Donna Mena	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O423		

R99 **East** **1/2-1** **4700** **Lower**	**BIOSYS** **1057 EAST MEADOW CIRCLE** **PALO ALTO, CA 00000**	**HAZNET**	**S102816813** **N/A**

X100 **ENE** **1/2-1** **4767** **Lower**	**CETUS IMMUNE CORPORATION** **3400 W BAYSHORE** **PALO ALTO, CA 94303**	**HAZNET**	**S100608133** **N/A**

CETUS IMMUNE CORPORATION (Continued) **S100608133**

HAZNET:

Year: Not reported
Gepaid: CAD120487061 Tepaid: CAD980884183
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 13
Tsd Name: AMERICAN ENVIRN MGMT CORP
Tsd Address: 11855 WHITE ROCK RD
RANCHO CORDOVA
Tsd County Sacramento
Mailing Address: Not reported
Category: 551
Disposal Method: H01

Year: Not reported
Gepaid: CAD120487061 Tepaid: CAD980884183
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 6
Tsd Name: AMERICAN ENVIRN MGMT CORP
Tsd Address: 11855 WHITE ROCK RD
RANCHO CORDOVA
Tsd County Sacramento
Mailing Address: Not reported
Category: 791
Disposal Method: H01

Year: Not reported
Gepaid: CAD120487061 Tepaid: CAT000646117
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 25
Tsd Name: CHEMICAL WASTE MGMT INC/KETTLEMANHILLS
Tsd Address: KETTLEMAN N DOME LDFL HWY 41
KETTLEMAN CITY
Tsd County Kings
Mailing Address: Not reported
Category: 352
Disposal Method: D80

Year: Not reported
Gepaid: CAD120487061 Tepaid: CAT000646117
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 20
Tsd Name: CHEMICAL WASTE MGMT INC/KETTLEMANHILLS
Tsd Address: KETTLEMAN N DOME LDFL HWY 41
KETTLEMAN CITY
Tsd County Kings
Mailing Address: Not reported
Category: 352
Disposal Method: D99

CETUS IMMUNE CORPORATION (Continued) **S100608133**

Year: Not reported
Gepaid: CAD120487061 Tepaid: CAT080014079
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 18
Tsd Name: CALIF ADVANCED ENVIRONMENTAL TECHN CP
Tsd Address: 1125 HENSLEY ST
RICHMOND
Tsd County Contra Costa
Mailing Address: Not reported
Category: 551
Disposal Method: H01

Year: Not reported
Gepaid: CAD120487061 Tepaid: CAT080014079
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 3
Tsd Name: CALIF ADVANCED ENVIRONMENTAL TECHN CP
Tsd Address: 1125 HENSLEY ST
RICHMOND
Tsd County Contra Costa
Mailing Address: Not reported
Category: 551
Disposal Method: UNK

Year: 93
Gepaid: CAD120487061 Tepaid: CAT080014079
Contact: DONALD OLIVIA Telephone: (415) 235-1393
Gen County: Santa Clara Tons: 0.06
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Contra Costa
Mailing Address: 1125 HENSLEY ST
RICHMOND, CA 94801
Category: Not reported
Disposal Method: H01

Year: 93
Gepaid: CAD120487061 Tepaid: CAT080014079
Contact: DONALD OLIVIA Telephone: (415) 235-1393
Gen County: Santa Clara Tons: 0.06
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County Contra Costa
Mailing Address: 1125 HENSLEY ST
RICHMOND, CA 94801
Category: 551
Disposal Method: Not reported

CETUS IMMUNE CORPORATION (Continued) **S100608133**

Year:	93		
Gepaid:	CAD120487061	Tepaid:	CAT080014079
Contact:	DONALD OLIVIA	Telephone:	(415) 235-1393
Gen County:	Santa Clara	Tons:	0.15
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	Contra Costa		
Mailing Address:	1125 HENSLEY ST RICHMOND, CA 94801		
Category:	551		
Disposal Method:	H01		

X101
ENE
1/2-1
4767
Lower

SYSTEMIX INC
3400 W BAYSHORE
PALO ALTO, CA 94303

RCRIS-SQG **1000427481**
FINDS **CAD120487061**

RCRIS:

Owner:	RENAULT AND HANDLEY (415) 856-3400
Contact:	EMI KUSABA (415) 856-3400
Record Date:	09/15/1986
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

Y102
East
1/2-1
4768
Lower

STANGENES INDUSTRIES INC
1052 E MEADOW CIRCLE
PALO ALTO, CA 94303

HAZNET **S100945724**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAL000050272	Tepaid:	CAL000048571
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	68
Tsd Name:	ALVISO INDEPENDENT OIL INC		
Tsd Address:	5002 ARCHER ST ALVISO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	221		
Disposal Method:	R01		

Y103
East
1/2-1
4768
Lower

PRUDENTIAL INSURANCE CO OF AMERICA
1053-1057 E MEADOW CIR
PALO ALTO, CA

S Bay Reg. 2 **S101641576**
CA SLIC **N/A**

PRUDENTIAL INSURANCE CO OF AMERICA (Continued) **S101641576**

South Bay Region 2:
Facility ID: 43S0735
Case Number: Not reported
Last Update: / /
RWQCB Initials: Not reported
DOHS Initials: Not reported
Type: Not reported
Lead: Regional Water Quality Board
Facility Status: INACTIVE
Discovered Date: Not reported

Staff: Not reported
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported

Facility Description: RESEARCH & DEVELOPMENT BUILDING
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Groundwater
Key Contaminant Concentration (1): TCE
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): 0
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: NOT DETERMINED
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: AS_OF:_06/06/88
Contaminant Concentration (1): YES
Well or Boring Number (1): MW-1
Initial Level Concentration (1): 4.5 PPB (parts per billion)
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: 0
Number of Private Wells: 2
Closure Name: NONE

PRUDENTIAL INSURANCE CO OF AMERICA (Continued) **S101641576**

Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: NOT DETERMINED
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: NOT DETER
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): NONE
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions:
1) GROUNDWATER INVESTIGATION CONDUCTED
Remediation: Not reported
Characterization Not reported
Comments NO SOURCE FOUND. 3 WELLS INSTALLED. TCE 14PPB IN GW. LOW PRIORITY. REVIEW FOR CLOSURE.

PRUDENTIAL INSURANCE CO OF AMERICA (Continued) **S101641576**

SLIC Region 2:
Facility ID: 43S0735
Region: 2
Facility Status: Inactive

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104 **WSW** **1/2-1** **4779** **Higher**	**OREGON EXPWY UNDERPASS** **OREGON EXPWY & ALMA ST** **PALO ALTO, CA 94304**	**CERC-NFRAP** **S Bay Reg. 2** **Cal-Sites** **CA SLIC**	**1000236244** **CAD982399800**

CERCLIS-NFRAP Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not reported
Ownership Status:	State Owned	NPL Status:	Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	19880401
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19890428

CAL-SITES:
Facility ID 43170004
Status: REFRW - DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROLBOARD (RWQCB) LEAD
Status Date: 02/03/1993
Lead: RWQCB
Region: 2 - BERKELEY
Branch: NC - NORTH COAST
File Name: Not reported
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agancy: REGIONAL WATER QUALITY CONTROL BOARD
NPL: Not reported
SIC: 17 SPECIAL TRADE CONTRACTORS
Facility Type: N/A
Facility Type Name: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF - SAN FRANCISCO BAY
Access: Controlled
Cortese: C
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
No. of Contamintion Sources: 0.00000
Lat/Long: 0.00000 0.00000′ 0.00000 / 0.00000 0.00000′ 0.00000
Lat/long Method: Not reported
State Assembly District Code: Not reported
State Senate District: Not reported

South Bay Region 2:

Facility ID:	43S0230	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8265
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Not reported		
Facility Status:	Not reported		
Discovered Date:	Not reported		

Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED

OREGON EXPWY UNDERPASS (Continued) **1000236244**

National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Groundwater
Key Contaminant Concentration (1):	TRICHLOROETHYLENE
Initial Maximum Concentration (1):	180 (parts per billion)
Current Maximum Concentration (1):	190 (parts per billion)
Contaminant Concentration Type (2):	Groundwater
Key Contaminant Concentration (2):	TETRACHLOROETHYLENE
Initial Maximum Concentration (2):	110 (parts per billion)
Current Maximum Concentration (2):	79 (parts per billion)
Contaminant Concentration Type (3):	Groundwater
Key Contaminant Concentration (3):	1,1,1-TRICHLOROETHANE
Initial Maximum Concentration (3):	12 (parts per billion)
Plume in Length (FT):	0
Size Depth (FT):	0
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	11 (parts per billion)
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	NO
Total of Extraction Flow Rate:	300.0gpm
Estimated % of Contaminants Contained:	81-100%
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	YES
Onsite Water Action Needed Start Date:	01/01/59
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	NO
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported

OREGON EXPWY UNDERPASS (Continued) **1000236244**

Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

Facility ID:	43S0230	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8265
Last Update:	07/08/91	Case Type:	NA
RWQCB Initials:	HTK	EPA Contact:	NONE
DOHS Initials:	Not reported	Map Number:	U14-06S03W12
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	ACTIVE		
Discovered Date:	09/01/86		

Facility Description:	HIGHWAY UNDERPASS DEWATERING SYSTEM
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Groundwater
Key Contaminant Concentration (1):	TRICHLOROETHYLENE
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Groundwater
Key Contaminant Concentration (2):	TETRACHLOROETHYLENE
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Groundwater
Key Contaminant Concentration (3):	1,1,1-TRICHLOROETHANE
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	0
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported

OREGON EXPWY UNDERPASS (Continued) **1000236244**

Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	NO
Total of Extraction Flow Rate:	EXTRACTION FLOW RATE AS OF 10/01/87 = 300.0 gpm
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	UPGRADIENT PLUME INTERCEPTION
Contaminant Concentration as of:	AS_OF:_06/02/88
Contaminant Concentration (1):	YES
Well or Boring Number (1):	PUMP S
Initial Level Concentration (1):	180 (parts per billion)
Current Level Concentration (1):	190 (parts per billion)
Contaminant Concentration (2):	YES
Well or Boring Number (2):	PUMP S
Initial Level Concentration (2):	110 (parts per billion)
Current Level Concentration (2):	79 (parts per billion)
Contaminant Concentration (3):	YES
Well or Boring Number (3):	PUMP S
Initial Level Concentration (3):	12 (parts per billion)
Current Level Concentration (3):	11 (parts per billion)
Number of Municipal Wells:	0
Number of Private Wells:	0
Closure Name:	NONE
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	YES
Onsite Water Action Needed Start Date:	01/01/59
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	NO
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	81-100%
Enforcement & Regulatory Action (1):	RWQCB: NPDES CA0029246 ORDER # 87-129
Enforcement Action Date (1):	09/16/87
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	NOT APPLICABLE.

OREGON EXPWY UNDERPASS (Continued) **1000236244**

Comments: ROADWAY DEWATERING SYSTEM OPERATED BY SANTA CLARA COUNTY SINCE 1959 RECENT- LY INTERCEPTED POLLUTED GROUNDWATER EMANATING FROM UPGRADIENT INDUSTRIES.

SLIC Region 2:

Facility ID:	43S0230
Region:	2
Facility Status:	Active

Z105
East
1/2-1
4788
Lower

MOZART RESTORATION
1068 EAST MEADOW CIRCLE
PALO ALTO, CA 94303

HAZNET **S102820384** **N/A**

Z106
East
1/2-1
4788
Lower

GUS MOZART PROPERTY
1068 E MEADOW CIR
PALO ALTO, CA

LUST **S103474233** **N/A**

LUST Region SC:

Facility ID:	06S2W08C01	Region:	Santa Clara
Facility Status:	Sign Off by SFRWQCB	Facility Region:	SANTA CLARA
Case Worker:	RWQCB	Closed Date:	12/2/94
Transfer Date:	Not reported	Entry Date:	4/9/92
Case Rank:	O121		

Z107
East
1/2-1
4788
Lower

MOZART PROPERTY
1068 E MEADOW CIR
PALO ALTO, CA

S Bay Reg. 2 **LUST** **S101303800** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Diesel		
Lead Agency:	Regional Board		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	12/09/1994	Confirm Leak:	Not reported
Workplan:	10/28/1994	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	12/02/1994	Release Date:	03/19/1992

LUST Region 2:

File Number:	43-1018	Lat/Long:	37.429988 / -122.108279
Region:	2		
Entered Date:	11-MAR-93	Last Review:	12/09/1994
Correspondence:	27-MAY-93	Report Date:	03/19/1992
Case Number:	Not reported	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/03/1992
How Stopped:	Close Tank	Stopped Date:	02/03/1992
Leak Source:	Tank	Leak Cause:	Structure Failure

MOZART PROPERTY (Continued) **S101303800**

Facility Status: Signed off, remedial action completed or deemed unnecessary
Notify: Not reported
Update Status: File archived
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.
Primary Substance: Diesel
Secondary Substance: Gasoline
Maximum Soil Concentration: 6600
Maximum Groundwater Impact: All water analysis are non-detectable
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: 6
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: Yes
Interim Remediation Date: 19-MAR-92
Lead Agency: Regional Board
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: 28-OCT-94
Assessment Underway: Not reported
Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 02-DEC-94
Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 5/17/96 CONTROL NO 120-059 SRC 0904709 059

South Bay Region 2:

Facility ID:	43-1018	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Regional Board
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Diesel
Secondary Substance Spilled: Gasoline

MOZART PROPERTY (Continued) **S101303800**

Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 6 (Feet)
Maximum Soil Concentration of Contaminates: 6600 (parts per million)
Max Grndwater Concentration of Contaminates: -1 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported

MOZART PROPERTY (Continued) **S101303800**

Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Z108 **East** **1/2-1** **4788** **Lower**	**E MEADOW ASSOC** **1069 E MEADOW CIRCLE** **PALO ALTO, CA 94303**	**HAZNET**	**S102804742** **N/A**

AA109 **WSW** **1/2-1** **4799** **Higher**	**SUMMERHILL (CHEVRON BULK OIL)** **2655 PARK BLVD** **PALO ALTO, CA**	**S Bay Reg. 2** **CA SLIC**	**S101641588** **N/A**

South Bay Region 2:
Facility ID: 43S0287
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Type: Not reported
Lead: Regional Water Quality Board
Facility Status: CLOSED
Discovered Date: Not reported
Staff: Not reported
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported

SUMMERHILL (CHEVRON BULK OIL) (Continued) **S101641588**

Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported

SUMMERHILL (CHEVRON BULK OIL) (Continued) **S101641588**

Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

SLIC Region 2:

Facility ID:	43S0287
Region:	2
Facility Status:	Closed - No Further Action

AB110 **WNW** **1/2-1** **4810** **Higher**	**FLETCHER PROPERTY** **2020 WAVERLEY ST** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S101303821** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	02		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	10/01/1996	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	09/26/1995	Release Date:	09/01/1995

LUST Region 2:

File Number:	43-0309	Lat/Long:	Not reported
Region:	2		
Entered Date:	01-OCT-96	Last Review:	10/01/1996
Correspondence:	13-SEP-95	Report Date:	09/01/1995
Case Number:	06S3W01P01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/06/1991
How Stopped:	Close Tank	Stopped Date:	12/06/1991
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	02
Secondary Substance:	Gasoline
Maximum Soil Concentration:	330

FLETCHER PROPERTY (Continued) **S101303821**

Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	23
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported
Pollution Characterization:	Not reported
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported
Monitoring Begun:	Not reported
Case Closed:	26-SEP-95

Abatement: No Action Taken
Comments: ARCHIVED 5/17/96 CONTROL NO 120-051 SRC 0904701 051

South Bay Region 2:

Facility ID:	43-0309	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	9
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Diesel
Secondary Substance Spilled:	Gasoline
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported

FLETCHER PROPERTY (Continued) **S101303821**

Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	330 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	23
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported

FLETCHER PROPERTY (Continued) **S101303821**

Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Y111 **East** **1/2-1** **4811** **Lower**	**SPACE SYSTEM LORAL** **1034 E MEADOW CIR BLDG 12** **PALO ALTO, CA 94303**	**FINDS** **RCRIS-LQG**	**1000182602** **CAD982360935**

RCRIS:

Owner: SPACE SYSTEMS LORAL
(415) 852-4395

Contact: BRETT MARTINEZ
(415) 852-6022

Record Date: 09/01/1996

Classification: Large Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

AB112 **WNW** **1/2-1** **4812** **Higher**	**FLETCHER RESIDENCE** **2020 WAVERLEY ST** **PALO ALTO, CA**	**LUST**	**S103474348** **N/A**

LUST Region SC:

Facility ID:	06S3W01P01	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	RWQCB	Closed Date:	9/26/95
Transfer Date:	Not reported	Entry Date:	10/1/96
Case Rank:	S121		

Z113 **East** **1/2-1** **4842** **Lower**	**ASSAY TECHNOLOGY INC** **1070 EAST MEADOW CIRCLE** **PALO ALTO, CA 94303**	**HAZNET**	**S100930100** **N/A**

ASSAY TECHNOLOGY INC (Continued) **S100930100**

HAZNET:

Year:	Not reported		
Gepaid:	CAL000024798	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	44
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	741		
Disposal Method:	D99		

AA114
WSW
1/2-1
4844
Higher

VISICOM DESIGN GROUP
2635 PARK BLVD
PALO ALTO, CA 94306

HAZNET

S102812733
N/A

AC115
SW
1/2-1
4935
Higher

SAY RAY
3251 ASH ST
PALO ALTO, CA 94306

HAZNET

S100873480
N/A

AC116
SW
1/2-1
4935
Higher

SAY RAY
3251 ASH ST
PALO ALTO, CA 94306

RCRIS-SQG
FINDS
HAZNET

1000596061
CAD983600206

RCRIS:

Owner:	M LOGANECKER (415) 493-8480
Contact:	MERYL LONGANECKER (415) 493-8480
Record Date:	08/05/1991
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

SAY RAY (Continued) **1000596061**

HAZNET:

Year:	Not reported		
Gepaid:	CAD983600206	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	148
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	R01		

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117 **WSW** **1/2-1** **4965** **Higher**	**CONSULTEX** **260 SHERIDAN AVE** **PALO ALTO, CA 94306**	**HAZNET**	**S102826747** **N/A**

AD118 **East** **1/2-1** **4992** **Lower**	**CRYSTAL TECH. INC.** **1060 E. MEADOW CIRCLE** **PALO ALTO, CA 94303**	**FINDS** **RCRIS-LQG** **HAZNET**	**1000387881** **CAD980882369**

RCRIS:

Owner: NOT REQUIRED
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 856-7916

Record Date: 09/01/1996

Classification: Large Quantity Generator

BIENNIAL REPORTS:

Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	11663.77	D002	37497.80
D011	542.00	D021	11121.77
D040	542.00	F001	2408.26
F002	2950.26	F003	18173.28
F005	11121.77		

Used Oil Recyc: No

Violation Status: Violation information exist

There are 2 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-Land Ban Requirements	06/12/1993
	Generator-All Requirements	06/12/1993

CRYSTAL TECH. INC. (Continued) **1000387881**

HAZNET:

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	Not reported
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	22
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	00		
Mailing Address:	Not reported		
Category:	135		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	66
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	122		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	20
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	133		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	46
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	134		
Disposal Method:	D99		

CRYSTAL TECH. INC. (Continued) **1000387881**

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	110
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	211		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	25
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	211		
Disposal Method:	R01		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	415
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	212		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	44
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	221		
Disposal Method:	D99		

CRYSTAL TECH. INC. (Continued) **1000387881**

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	62
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	551		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	32
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	741		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	732
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	791		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	12
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	792		
Disposal Method:	D99		

CRYSTAL TECH. INC. (Continued) **1000387881**

Year: Not reported
Gepaid: CAD980882369 Tepaid: CAD059494310
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 175
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 135
Disposal Method: D99

Year: Not reported
Gepaid: CAD980882369 Tepaid: CAD059494310
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 19
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 181
Disposal Method: D99

Year: Not reported
Gepaid: CAD980882369 Tepaid: CAD059494310
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 83
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 791
Disposal Method: D99

Year: Not reported
Gepaid: CAD980882369 Tepaid: CAD059494310
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 67
Tsd Name: SOLVENT SERVICE INC
Tsd Address: 1021 BERRYESSA RD
SAN JOSE
Tsd County Santa Clara
Mailing Address: Not reported
Category: 791
Disposal Method: H01

CRYSTAL. TECH. INC. (Continued) **1000387881**

Year:	Not reported		
Gepaid:	CAD980882369	Tepaid:	CAD074644659
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	22
Tsd Name:	BARON-BLAKESLEE INC		
Tsd Address:	8333 ENTERPRISE DR NEWARK		
Tsd County	Alameda		
Mailing Address:	Not reported		
Category:	211		
Disposal Method:	H01		

Year:	93		
Gepaid:	CAD980882369	Tepaid:	Not reported
Contact:	Not reported	Telephone:	Not reported
Gen County:	Santa Clara	Tons:	0.22
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	00		
Mailing Address:	Not reported		
Category:	135		
Disposal Method:	D99		

Year:	93		
Gepaid:	CAD980882369	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Santa Clara	Tons:	0.44
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Mateo		
Mailing Address:	Not reported		
Category:	Not reported		
Disposal Method:	Not reported		

Year:	93		
Gepaid:	CAD980882369	Tepaid:	CAD059494310
Contact:	SUE VEDANTHAM ENVIRON MANAGER	Telephone:	(408) 451-5000
Gen County:	Santa Clara	Tons:	1.75
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	Santa Clara		
Mailing Address:	1040 COMMERCIAL ST STE 109 SAN JOSE, CA 95112		
Category:	135		
Disposal Method:	D99		

CRYSTAL TECH. INC. (Continued) **1000387881**

Year:	93		
Gepaid:	CAD980882369	Tepaid:	CAD059494310
Contact:	SUE VEDANTHAM ENVIRON MANAGER	Telephone:	(408) 451-5000
Gen County:	Santa Clara	Tons:	0.19
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	Santa Clara		
Mailing Address:	1040 COMMERCIAL ST STE 109 SAN JOSE, CA 95112		
Category:	181		
Disposal Method:	D99		

Year:	93		
Gepaid:	CAD980882369	Tepaid:	CAD059494310
Contact:	SUE VEDANTHAM ENVIRON MANAGER	Telephone:	(408) 451-5000
Gen County:	Santa Clara	Tons:	0.83
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	Santa Clara		
Mailing Address:	1040 COMMERCIAL ST STE 109 SAN JOSE, CA 95112		
Category:	791		
Disposal Method:	Not reported		

Year:	93		
Gepaid:	CAD980882369	Tepaid:	CAD059494310
Contact:	SUE VEDANTHAM ENVIRON MANAGER	Telephone:	(408) 451-5000
Gen County:	Santa Clara	Tons:	0.67
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	Santa Clara		
Mailing Address:	1040 COMMERCIAL ST STE 109 SAN JOSE, CA 95112		
Category:	791		
Disposal Method:	H01		

Year:	93		
Gepaid:	CAD980882369	Tepaid:	CZD074644651
Contact:	Not reported	Telephone:	Not reported
Gen County:	Santa Clara	Tons:	0.22
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	00		
Mailing Address:	Not reported		
Category:	211		
Disposal Method:	Not reported		

AC119	**DURA BOND BEARING COMPANY**	**S Bay Reg. 2**	**S102429005**
SW	**3201 ASH ST**	**Cortese**	**N/A**
1/2-1	**PALO ALTO, CA**	**LUST**	
4999			
Higher			

DURA BOND BEARING COMPANY (Continued) **S102429005**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Preliminary site assessment underway		
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)		
Review Date:	10/06/1989	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	04/01/1986
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	09/26/1988

LUST Region 2:

File Number:	43-1824	Lat/Long:	37.422584 / -122.136146
Region:	2		
Entered Date:	Not reported	Last Review:	10/06/1989
Correspondence:	06-OCT-89	Report Date:	09/26/1988
Case Number:	06S3W12J01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	10/01/1984
How Stopped:	Close Tank	Stopped Date:	10/01/1984
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Preliminary site assessment underway		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Undefined		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Solvents
Maximum Soil Concentration:	5200
Maximum Groundwater Impact:	9500
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	14
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	Yes
Interim Remediation Date:	01-APR-86
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	01-APR-86
Pollution Characterization:	Not reported
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported

DURA BOND BEARING COMPANY (Continued) **S102429005**

Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Treat soil. (e.g. aeration, biodegradation, etc.)
Comments: JKB UNACCEPTABLE DL'S, 09/19/89 SAMPLING DATE. SBT ALSO

CORTESE:
Reg By: LTNKA
Reg Id: 43-1824
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1824	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 3
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Solvents
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 14 (Feet)
Maximum Soil Concentration of Contaminates: 5200 (parts per million)
Max Grndwater Concentration of Contaminates: 9500 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported

DURA BOND BEARING COMPANY (Continued) **S102429005**

Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

AC120
SW
1/2-1
4999
Higher

DURA-BOND
3201 ASH ST
PALO ALTO, CA 94306

FINDS 1000143482
CERC-NFRAP CAD014440648
S Bay Reg. 2
CA SLIC
LUST

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Unknown
Federal Facility: Not reported
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY Completed: 19850401
Assessment: PRELIMINARY ASSESSMENT Completed: 19870901

DURA-BOND (Continued) 1000143482

LUST Region SC:

Facility ID:	06S3W12J01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O322		

South Bay Region 2:

Facility ID:	43S0025	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8147
Last Update:	01/18/94	Case Type:	TK
RWQCB Initials:	HTK	EPA Contact:	NONE
DOHS Initials:	Not reported	Map Number:	U14-06S03W12
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	ACTIVE		
Discovered Date:	02/28/81		

Facility Description:	MANUFACTURES BEARINGS
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Groundwater
Key Contaminant Concentration (1):	TCE
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Groundwater
Key Contaminant Concentration (2):	XYLENE ISOMERS & ETHYL BENZENE
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Groundwater
Key Contaminant Concentration (3):	VOLATILE FUEL HYDROCARBONS
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	0
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	YES
Total of Extraction Flow Rate:	EXTRACTION FLOW RATE AS OF / / = 0.0 gpm
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	SOIL CONTAMINATION PAST WASTE IMPOUNDMENT. UG TANK
Contaminant Concentration as of:	AS_OF:_03/01/89
Contaminant Concentration (1):	YES
Well or Boring Number (1):	DM-1
Initial Level Concentration (1):	708 (parts per billion)
Current Level Concentration (1):	280 (parts per billion)
Contaminant Concentration (2):	YES
Well or Boring Number (2):	E-2
Initial Level Concentration (2):	1200 (parts per billion)
Current Level Concentration (2):	36 (parts per billion)

DURA-BOND (Continued) **1000143482**

Contaminant Concentration (3):	YES
Well or Boring Number (3):	E-2
Initial Level Concentration (3):	9500 (parts per billion)
Current Level Concentration (3):	1300 (parts per billion)
Number of Municipal Wells:	0
Number of Private Wells:	0
Closure Name:	NONE
Closure Date:	Not reported
Soil Action Needed Start Date:	03/15/81
Soil Action Needed End Date:	04/15/81
Onsite Water Action Needed:	YES
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	NOT DETER
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	1-40%
Enforcement & Regulatory Action (1):	NONE
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported

Immediate Response Actions:

1) 60 CU.YDS. REMOVED AT WASTE IMPOUNDMENT SITE.BELIEVE GW CONTAM. BY CHLORIN-ATED SOLVENTS FROM OFFSITE. HYDROCARBONS FROM ONSITE LEAK BEING EVALUATED.
2) PROPOSAL DUE 8/15/89 FOR HYDROCARBON PROBLEM

Remediation:	Not reported
Characterization	UPGRADIENT WELL INSTALLED. CHLORINATED SOLVENTS DETECTED COMING ONTO SITE MONITORING OF WELLS FOR FUEL HYDROCARBONS. ADDITIONAL WELL BEING INSTALLED.
Comments	CONTINUED MONITORING FOR FUEL HYDROCARBONS. RWQCB SAMPLED FOR VOC. SITE CLOSURE PROCEDURES UNDERWAY. HYDROCARBON PLUME TO BE DEFIND.

DURA-BOND (Continued) **1000143482**

SLIC Region 2:

Facility ID:	43S0025
Region:	2
Facility Status:	Active

AC121
SW
1/2-1
4999
Higher

STAR GRAPHIC ARTS CO. INC.
3200 ASH ST.
PALO ALTO, CA 94306

UST **U001595969**
N/A

State UST:

Facility ID:	60093		
Tank Num:	1	Container Num:	1
Tank Capacity:	2000	Year Installed:	1979
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	GEO. GANANIAN	Telephone:	(415) 494-3351
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	GRAPHIC ARTS

AC122
SW
1/2-1
4999
Higher

STAR GRAPHIC ARTS CO. INC.
3200 ASH ST
PALO ALTO, CA 94306

Ca. FID **S101623439**
N/A

AE123
South
1/2-1
5010
Higher

JEFFREY FROST DDS
3505 ALMA ST.
PALO ALTO, CA 94306

HAZNET **S100865080**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAL930775529	Tepaid:	CAD981161367
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	12
Tsd Name:	MIKEY CORP		
Tsd Address:	SCHOONMAKER BLDG #1 10 LIBERTY SHIP WAY SAUSALITO		
Tsd County	Marin		
Mailing Address:	Not reported		
Category:	541		
Disposal Method:	R01		

124
NNE
1/2-1
5017
Lower

KAPTRON INC
2525 E BAYSHORE FRONTAGE
PALO ALTO, CA 94003

RCRIS-SQG **1000420303**
FINDS **CAD982522005**

KAPTRON INC (Continued) **1000420303**

RCRIS:
Owner: KAPTRON INC
(415) 555-1212
Contact: ENVIRONMENTAL MANAGER
(415) 493-8008
Record Date: 09/01/1996
Classification: Small Quantity Generator
Used Oil Recyc: No
Violation Status: No violations found

AC125 **SW** **1/2-1** **5021** **Higher**	**SYSTEMS CONTROL INC** **220 PORTAGE** **PALO ALTO, CA 94306**	**RCRIS-SQG** **FINDS**	**1000400299** **CAD981657984**

RCRIS:
Owner: WSJ PROPERTIES
(415) 555-1212
Contact: ENVIRONMENTAL MANAGER
(415) 494-1165
Record Date: 09/30/1986
Classification: Small Quantity Generator
Used Oil Recyc: No
Violation Status: No violations found

AC126 **SW** **1/2-1** **5033** **Higher**	**VARIAN ASSOCIATES- LAMBERT SIT** **425 LAMBERT** **PALO ALTO, CA 94306**	**RCRIS-SQG** **FINDS** **S Bay Reg. 2**	**1000245633** **CAD981399835**

RCRIS:
Owner: VARIAN ASSOCIATES
(415) 555-1212
Contact: ENVIRONMENTAL MANAGER
(415) 424-5625
Record Date: 09/01/1996
Classification: Small Quantity Generator
Used Oil Recyc: No
Violation Status: No violations found

South Bay Region 2:

Facility ID:	43-1600	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

VARIAN ASSOCIATES- LAMBERT SIT (Continued) **1000245633**

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Region Board is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 3700 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported

VARIAN ASSOCIATES- LAMBERT SIT (Continued) **1000245633**

Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

AD127 **SPACE SYSTEMS/LORAL** **HAZNET** **S100945563**
East **1036 E MEADOW CIR** **N/A**
1/2-1 **PALO ALTO, CA 94303**
5034
Lower

HAZNET:
Year: Not reported
Gepaid: CAD982360935
Tepaid: CAD050806850
Contact: Not reported
Telephone: Not reported
Gen County: Not reported
Tons: 20
Tsd Name: OIL PROCESS CO (DBA)
Tsd Address: 5756 ALBA ST
LOS ANGELES
Tsd County Los Angeles
Mailing Address: Not reported
Category: 121
Disposal Method: T01

SPACE SYSTEMS/LORAL (Continued) **S100945563**

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	25
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	122		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	20
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	122		
Disposal Method:	T01		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	0
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	181		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	0
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	181		
Disposal Method:	R01		

SPACE SYSTEMS/LORAL (Continued) **S100945563**

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	0
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	551		
Disposal Method:	R01		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	1
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	724		
Disposal Method:	R01		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	1
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	725		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	1
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	725		
Disposal Method:	R01		

SPACE SYSTEMS/LORAL (Continued) **S100945563**

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	25
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	791		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	4
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	791		
Disposal Method:	T01		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAD050806850
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	21
Tsd Name:	OIL PROCESS CO (DBA)		
Tsd Address:	5756 ALBA ST LOS ANGELES		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	792		
Disposal Method:	T01		

Year:	Not reported		
Gepaid:	CAD982360935	Tepaid:	CAL000027741
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	294
Tsd Name:	CALIFORNIA ASBESTOS MONOFILL		
Tsd Address:	O'BYRNES FERRY RD COPPEROPOLIS		
Tsd County	Calaveras		
Mailing Address:	Not reported		
Category:	151		
Disposal Method:	UNK		

Y128 **East** **1/2-1** **5042** **Lower**	**CALIFORNIA PACIFIC COMMERICAL CORP** **1020 MEADOW CIRCLE** **PALO ALTO, CA 94306**	**HAZNET**	**S102792984** **N/A**

AF129 **East** **1/2-1** **5045** **Lower**	**JEOL USA INC** **3500 WEST BAYSHORE ROAD** **PALO ALTO, CA 94303**	**HAZNET**	**S100937732** **N/A**

JEOL USA INC (Continued) **S100937732**

HAZNET:

Year:	Not reported		
Gepaid:	CAL000039907	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	7
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	551		
Disposal Method:	D99		

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
AE130 South 1/2-1 5045 Higher	**DAVID L VANDERWILT DDS 3515 ALMA ST PALO ALTO, CA 94306**	**HAZNET**	**S102817197 N/A**
AC131 SW 1/2-1 5053 Higher	**BEMISS JASON CORP 250 PORTAGE AVE PALO ALTO, CA 94304**	**CA SLIC**	**S102405503 N/A**

BEMISS JASON CORP (Continued) **S102405503**

SLIC Region 2:

Facility ID:	43S2046
Region:	2
Facility Status:	No Further Action

AC132
SW
1/2-1
5068
Higher

LAMBERT/ASH
PALO ALTO, CA 94503

CHMIRS **S100277081**
N/A

CHMIRS:

OES Control Number:	9114770	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	SHELL TELLUS OIL 32		
Extent of Release:	Not reported		
CAS Number:	64742547	Quantity Released:	250
Environmental Contamination:	Water	Property Use:	Industrial, Utility
Incident Date:	02-JAN-91	Date Completed:	02-JAN-91

AF133
East
1/2-1
5075
Lower

BIOMYNE TECHNOLOGY COMPANY
3510 W BAYSHORE RD
PALO ALTO, CA 94303

HAZNET **S100856543**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAL000058963	Tepaid:	CAD059494310
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	5
Tsd Name:	SOLVENT SERVICE INC		
Tsd Address:	1021 BERRYESSA RD SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	551		
Disposal Method:	H01		

AD134
East
1/2-1
5081
Lower

CRYSTAL TECHNOLOGY INC
1035 E MEADOW CIR
PALO ALTO, CA 94043

RCRIS-LQG **1000387894**
CAT080013899

CRYSTAL TECHNOLOGY INC (Continued) **1000387894**

RCRIS:

Owner:	NOT REQUIRED (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (415) 856-7916
Record Date:	11/30/1992
Classification:	Large Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

AG135 **SW** **1/2-1** **5095** **Higher**	**395 OLIVE ST.** **PALO ALTO, CA 94306**	**CHMIRS**	**S100218406** **N/A**

CHMIRS:

OES Control Number:	8910280	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	UNKNOWN		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	Not reported
Environmental Contamination:	Ground	Property Use:	Residential
Incident Date:	07-APR-89	Date Completed:	07-APR-89

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136 **SW** **1/2-1** **5120** **Higher**	**PRECISION AUTOMOTIVE SERVICE** **439 LAMBERT AVE** **PALO ALTO, CA 94306**	**HAZNET**	**S100942693** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAL000060352	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	42
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	R01		

AH137 **ESE** **1/2-1** **5163** **Lower**	**SPACE SYSTEMS/LORAL** **1085 E MEADOW CIR** **PALO ALTO, CA 94303**	**HAZNET**	**S100945564** **N/A**

SPACE SYSTEMS/LORAL (Continued) **S100945564**

HAZNET:

Year: Not reported
Gepaid: CAD982360927 Tepaid: CAD050806850
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 4
Tsd Name: OIL PROCESS CO (DBA)
Tsd Address: 5756 ALBA ST
LOS ANGELES
Tsd County Los Angeles
Mailing Address: Not reported
Category: 135
Disposal Method: D99

Year: Not reported
Gepaid: CAD982360927 Tepaid: CAD050806850
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 4
Tsd Name: OIL PROCESS CO (DBA)
Tsd Address: 5756 ALBA ST
LOS ANGELES
Tsd County Los Angeles
Mailing Address: Not reported
Category: 551
Disposal Method: R01

Year: Not reported
Gepaid: CAD982360927 Tepaid: CAD050806850
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 4
Tsd Name: OIL PROCESS CO (DBA)
Tsd Address: 5756 ALBA ST
LOS ANGELES
Tsd County Los Angeles
Mailing Address: Not reported
Category: 551
Disposal Method: T01

AH138 **ESE** **1/2-1** **5163** **Lower**	**FORD AEROSPACE CORP** **1085 E MEADOW CIR** **PALO ALTO, CA 94303**	**RCRIS-SQG** **FINDS** **S Bay Reg. 2** **Cal-Sites** **CA SLIC**	**1000182601** **CAD982360927**

RCRIS:

Owner: FORD AEROSPACE
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 852-4011

Record Date: 09/01/1996

Classification: Small Quantity Generator

FORD AEROSPACE CORP (Continued) **1000182601**

Used Oil Recyc: No

Violation Status: No violations found

CAL-SITES:
Facility ID 43360074
Status: REFRW - DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROLBOARD (RWQCB) LEAD
Status Date: 06/08/1994
Lead: Not reported
Region: 2 - BERKELEY
Branch: NC - NORTH COAST
File Name: Not reported
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agancy: N/A
NPL: Not reported
SIC: 36 MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Facility Type: N/A
Facility Type Name: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF - SAN FRANCISCO BAY
Access: Controlled
Cortese: C
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
No. of Contamintion Sources: 0.00000
Lat/Long: 0.00000 0.00000´ 0.00000 / 0.00000 0.00000´ 0.00000
Lat/long Method: Not reported
State Assembly District Code: Not reported
State Senate District: Not reported

South Bay Region 2:
Facility ID: 43S0228
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Type: Not reported
Lead: Not reported
Facility Status: Not reported
Discovered Date: Not reported
Staff: Not reported
File Number: 2189.8288
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Groundwater
Key Contaminant Concentration (1): TCE
Initial Maximum Concentration (1): 1500 (parts per billion)
Current Maximum Concentration (1): 630 (parts per billion)
Contaminant Concentration Type (2): Groundwater
Key Contaminant Concentration (2): PCE
Initial Maximum Concentration (2): 1200 (parts per billion)
Current Maximum Concentration (2): 660 (parts per billion)
Contaminant Concentration Type (3): Groundwater

FORD AEROSPACE CORP (Continued) **1000182601**

Key Contaminant Concentration (3): 1,1,1-TCA
Initial Maximum Concentration (3): 110 (parts per billion)
Plume in Length (FT): >960
Size Depth (FT): 55
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): <.5 (parts per billion)
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: NOT DETERMINED
Total of Extraction Flow Rate: 70.0gpm
Estimated % of Contaminants Contained: NOT BEGUN
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: YES
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: ND
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported

FORD AEROSPACE CORP (Continued) **1000182601**

Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

SLIC Region 2:
Facility ID: 43S0228
Region: 2
Facility Status: Active

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
AG139 **SW** **1/2-1** **5186** **Higher**	**JOST HEATING & SHEET METAL INC** **412 OLIVE AVE** **PALO ALTO, CA**	S Bay Reg. 2 LUST	**S102432015** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	07/09/1992	Confirm Leak:	Not reported
Workplan:	05/30/1991	Prelim Assess:	08/23/1991
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	07/09/1992	Release Date:	02/07/1986

LUST Region 2:

File Number:	43-0765	Lat/Long:	37.423168 / -122.138449
Region:	2		
Entered Date:	Not reported	Last Review:	07/09/1992
Correspondence:	09-JUL-92	Report Date:	02/07/1986
Case Number:	06S3W12K03	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/07/1986
How Stopped:	Close Tank	Stopped Date:	02/07/1986
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance: Gasoline
Secondary Substance: Regular Gasoline

JOST HEATING & SHEET METAL INC (Continued) **S102432015**

Maximum Soil Concentration: 668
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: Yes
Interim Remediation Date: 07-FEB-86
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: 30-MAY-91
  Assessment Underway: 23-AUG-91
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: 09-JUL-92
Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 9/12/96 CONTROL NO 120-097 SRC 0904747 097

LUST Region SC:

Facility ID:	06S3W12K03	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Case Closed	Closed Date:	7/9/92
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	S221		

South Bay Region 2:

Facility ID:	43-0765	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Regular Gasoline
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported

JOST HEATING & SHEET METAL INC (Continued) **S102432015**

Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 668 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported

JOST HEATING & SHEET METAL INC (Continued) **S102432015**

Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

AI140
WSW
1/2-1
5196
Higher

1X NORTH COUNTY OFFICE BUILDING
270 GRANT AVE
PALO ALTO, CA 00000

HAZNET **S100851996** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAC000697776	Tepaid:	CAD990794133
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	1262
Tsd Name:	FORWARD INC		
Tsd Address:	1145 WEST CHARTER MANTECA		
Tsd County	San Joaquin		
Mailing Address:	Not reported		
Category:	151		
Disposal Method:	D80		

Year:	93		
Gepaid:	CAC000697776	Tepaid:	CAD990794133
Contact:	ROSALIE J GATES CONTROLLER	Telephone:	(209) 466-4482
Gen County:	Santa Clara	Tons:	2.52
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Joaquin		
Mailing Address:	P O BOX 6336 STOCKTON, CA 95206		
Category:	151		
Disposal Method:	Not reported		

Year:	93		
Gepaid:	CAC000697776	Tepaid:	CAD990794133
Contact:	ROSALIE J GATES CONTROLLER	Telephone:	(209) 466-4482
Gen County:	Santa Clara	Tons:	22.72
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Joaquin		
Mailing Address:	P O BOX 6336 STOCKTON, CA 95206		
Category:	151		
Disposal Method:	D80		

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
AI141 **WSW** **1/2-1** **5196** **Higher**	**1X COUNTY OF SANTA CLARA** **270 GRANT AVE** **PALO ALTO, CA 94303**	**HAZNET**	**S100850086** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAC000790832	Tepaid:	CAD990794133
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	842
Tsd Name:	FORWARD INC		
Tsd Address:	1145 WEST CHARTER MANTECA		
Tsd County	San Joaquin		
Mailing Address:	Not reported		
Category:	151		
Disposal Method:	D80		

Year:	93		
Gepaid:	CAC000790832	Tepaid:	CAD990794133
Contact:	ROSALIE J GATES CONTROLLER	Telephone:	(209) 466-4482
Gen County:	Santa Clara	Tons:	12.63
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Joaquin		
Mailing Address:	P O BOX 6336 STOCKTON, CA 95206		
Category:	151		
Disposal Method:	D80		

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
AJ142 **North** **1/2-1** **5199** **Lower**	**BERNAD HODES ADVERTISING** **1101 EMBARCADERO** **PALO ALTO, CA 94303**	**HAZNET**	**S100856372** **N/A**

HAZNET:

Year:	Not reported		
Gepaid:	CAL930325742	Tepaid:	NVD981639826
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	30
Tsd Name:	UNKNOWN		
Tsd Address:	Not reported		
Tsd County	99		
Mailing Address:	Not reported		
Category:	121		
Disposal Method:	UNK		

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
143 **NNW** **1/2-1** **5218** **Lower**	**MCATEE RESIDENCE** **51 PRIMROSE WAY** **PALO ALTO, CA**	**S Bay Reg. 2** **CA SLIC**	**S101641586** **N/A**

South Bay Region 2:

Facility ID:	43S0661	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

MCATEE RESIDENCE (Continued) **S101641586**

Type: Not reported
Lead: Regional Water Quality Board
Facility Status: CLOSED
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported

MCATEE RESIDENCE (Continued) **S101641586**

Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments closed 6/22/93

MCATEE RESIDENCE (Continued) **S101641586**

SLIC Region 2:

Facility ID:	43S0661
Region:	2
Facility Status:	Closed - No Further Action

AJ144
North
1/2-1
5235
Lower

EMBARCADERO SHELL
1161 EMBARCADERO RD
PALO ALTO, CA 94303

UST **U001595869**
N/A

State UST:

Facility ID:	9496		
Tank Num:	1	Container Num:	1
Tank Capacity:	10000	Year Installed:	1981
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	1/4 inches
Leak Detection:	Stock Inventor, GW Monitoring Well		
Contact Name:	PEARSON/ANDREWS INC D-1*	Telephone:	(415) 856-6388
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	9496		
Tank Num:	2	Container Num:	2
Tank Capacity:	10000	Year Installed:	1981
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	1/4 inches
Leak Detection:	Stock Inventor, GW Monitoring Well		
Contact Name:	PEARSON/ANDREWS INC D-1*	Telephone:	(415) 856-6388
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	9496		
Tank Num:	3	Container Num:	3
Tank Capacity:	10000	Year Installed:	1981
Tank Used for:	PRODUCT		
Type of Fuel:	PREMIUM	Tank Constrctn:	1/4 inches
Leak Detection:	Stock Inventor, GW Monitoring Well		
Contact Name:	PEARSON/ANDREWS INC D-1*	Telephone:	(415) 856-6388
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	9496		
Tank Num:	4	Container Num:	4
Tank Capacity:	500	Year Installed:	Not reported
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	PEARSON/ANDREWS INC D-1*	Telephone:	(415) 856-6388
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

AJ145
North
1/2-1
5235
Lower

EMBARCADERO SHELL
1161 EMBARCADERO RD
PALO ALTO, CA 94303

Ca. FID **S101623395**
N/A

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
AJ146 **North** **1/2-1** **5235** **Lower**	**SHELL OIL CO** **1161 EMBARCADERO** **PALO ALTO, CA 94303**	**RCRIS-SQG** **FINDS** **S Bay Reg. 2** **Cortese** **LUST**	**1000288576** **CAD981400955**

RCRIS:

Contact: SONDRA BIENVENU
(713) 241-2258

Record Date: 04/08/1998

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	11/25/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	02/20/1987
Pollution Char:	09/29/1987	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	02/27/1987

LUST Region 2:

File Number:	43-1270	Lat/Long:	37.446956 / -122.125227
Region:	2		
Entered Date:	07-MAR-87	Last Review:	11/25/1997
Correspondence:	02-AUG-93	Report Date:	02/27/1987
Case Number:	05S2W31P01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/27/1987
How Stopped:	Close Tank	Stopped Date:	02/27/1987
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Waste Oil
Maximum Soil Concentration:	62
Maximum Groundwater Impact:	1900
Current Benzene in Groundwater:	180
Maximum Benzene Concentration:	1800
Nuber of Wells:	Not reported
Depth to Groundwater:	2
MTBE Contamination Level:	130
Maximum MTBE:	320
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency

SHELL OIL CO (Continued) **1000288576**

Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: 20-FEB-87
  Pollution Characterization: 29-SEP-87
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: No Action Taken
Comments: 300 GALS FP REMOVED 9/90-1/91, 350 GALS FP &H20 REMOVED 1/24/91

LUST Region SC:

Facility ID:	05S2W31P01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	0413		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1270
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1270	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Waste Oil
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported

SHELL OIL CO (Continued) **1000288576**

Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 2 (Feet)
Maximum Soil Concentration of Contaminates: 62 (parts per million)
Max Grndwater Concentration of Contaminates: 1900 (parts per billion)
Benzene: 180
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported

SHELL OIL CO (Continued) **1000288576**

Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

147
SW
1/2-1
5236
Higher

STANFORD NISSAN INC
473 ACACIA
PALO ALTO, CA 94306

RCRIS-SQG **1000857643**
FINDS **CAD983670860**

RCRIS:
Owner: HERBERT T JAEHNICHEN
(415) 324-4488

Contact: KIM SMITH
(415) 493-0363

Record Date: 07/07/1993

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

148
WSW
1/2-1
5260
Higher

TERV HARADA DDS
2421 PARK BLVD
PALO ALTO, CA 94306

HAZNET **S100943740**
N/A

HAZNET:

Year:	Not reported		
Gepaid:	CAL921185576	Tepaid:	CAL922955281
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	6
Tsd Name:	DIAGNOSTIC X RAY IMAGING INC		
Tsd Address:	636 NEWHALL STREET SAN JOSE		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	541		
Disposal Method:	R01		

AK149
SW
> 1
5296
Higher

FORMER DURA-BOND FACILITY
370 PORTAGE AVE
PALO ALTO, CA

CA SLIC **S103393983**
N/A

FORMER DURA-BOND FACILITY (Continued) **S103393983**

SLIC Region 2:
Facility ID: 43S0562
Region: 2
Facility Status: Closed - No Further Action

AL150 **WSW** **> 1** **5302** **Higher**	**HEWLETT PACKARD MFG DIV** **395 PAGE MILL RD** **PALO ALTO, CA 94306**	**FINDS** **RCRIS-LQG** **CORRACTS** **CERC-NFRAP** **S Bay Reg. 2** **Cortese** **CA SLIC** **LUST**	**1000281823** **CAD009122557**

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Unknown
Federal Facility: Not reported
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY Completed: 19860501
Assessment: PRELIMINARY ASSESSMENT Completed: 19871001

CORRACTS Data:
Prioritization: Medium
Status: RFI Imposition, RCRA Facility Investigation Approved, Corrective Measure Study Approved, Date for Remedy Selection (CM Imposed), Corrective Measures Design Approved, Corrective Measures Investigation Workplan Approved, Certification of Remedy Completion (CMI), Stabilization Measures Implemented, Stabilization Construction Completed

RCRIS Corrective Action Summary:
Effective Date: 04/19/1989
Legal Authority: Other, specified by Legal Authority Citation
Effective Date: 09/21/1994
Legal Authority: Other, specified by Legal Authority Citation

RCRIS:
Owner: HEWLETT PACKARD CO
(415) 857-5809

Contact: JACINTA PISTER
(415) 857-5809

Record Date: 09/01/1996

Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	1794.00	D002	25255232.00
D006	240.00	D007	101024.00
D035	584.00	F001	7681.00
F002	5701.00	F003	9715.00
F005	7495.00	F019	944.00

HEWLETT PACKARD MFG DIV (Continued) **1000281823**

Used Oil Recyc: No

Violation Status: Violation information exist

There are 13 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	TSD-Land Ban Requirements	04/27/1992
	TSD-Other Requirements	04/27/1992
	TSD-Other Requirements	04/27/1992
	TSD-Other Requirements	04/27/1992
	Generator-All Requirements	04/27/1992
Compliance Evaluation Inspection (CEI)	TSD-Land Ban Requirements	04/27/1992
	Generator-Land Ban Requirements	04/27/1992
	TSD-Other Requirements	04/27/1992
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	04/27/1992
	TSD-Other Requirements	04/27/1992
	TSD-Closure/Post Closure Requirements	04/27/1992
Other Evaluation	TSD-Land Ban Requirements	04/27/1992
	Generator-Land Ban Requirements	04/27/1992

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Solvents		
Lead Agency:	Regional Board		
Case Type:	Undefined		
Status:	Preliminary site assessment underway		
Abate Method:	Vent Soil - bore holes in soil to allow volatilization of contaminants		
Review Date:	05/11/1988	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	03/30/1990
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	05/11/1988

CORTESE:

Reg By:	LTNKA
Reg Id:	43-1959
Region:	CORTESE

South Bay Region 2:

Facility ID:	43-1959	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	There is insufficient data or information to determine whether groundwater and/or soil has been impacted		
Lead:	Regional Board		
Facility Status:	Not reported		
Discovered Date:	Not reported		
Facility Description:	Not reported		
Phase of Work by Responsible Party:	3		
National Priority List:	NOT REPORTED		

HEWLETT PACKARD MFG DIV (Continued) **1000281823**

Primary Substance Spilled:	Solvents
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported

HEWLETT PACKARD MFG DIV (Continued) **1000281823**

Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

HEWLETT PACKARD MFG DIV (Continued) **1000281823**

SLIC Region 2:
Facility ID: 43S0053
Region: 2
Facility Status: Active

AK151 SW > 1 5347 Higher	**DURA-BOND BEARING COMPANY 395 PORTAGE PALO ALTO, CA 94306**	**RCRIS-SQG FINDS UST Ca. FID S Bay Reg. 2 Cal-Sites**	**1000143481 CAD063553630**

RCRIS:
Owner: MCQUAY-NORRIS INC.
(314) 776-4800

Contact: ENVIRONMENTAL MANAGER
(415) 493-6546

Record Date: 09/01/1996

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

CAL-SITES:
Facility ID 43370006
Status: REFRW - DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROLBOARD (RWQCB) LEAD
Status Date: 11/15/1993
Lead: Not reported
Region: 2 - BERKELEY
Branch: NC - NORTH COAST
File Name: Not reported
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agancy: N/A
NPL: Not reported
SIC: 37 MANU - TRANSPORTATION EQUIPMENT
Facility Type: N/A
Facility Type Name: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF - SAN FRANCISCO BAY
Access: Controlled
Cortese: C
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
No. of Contamintion Sources: 0.00000
Lat/Long: 0.00000 0.00000´ 0.00000 / 0.00000 0.00000´ 0.00000
Lat/long Method: Not reported
State Assembly District Code: Not reported
State Senate District: Not reported

South Bay Region 2:

Facility ID:	43S0025	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8147
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported

DURA-BOND BEARING COMPANY (Continued) **1000143481**

DOHS Initials: Not reported Map Number: Not reported
Type: Not reported
Lead: Not reported
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: Yes
Contaminant Concentration Type (1): Groundwater
Key Contaminant Concentration (1): TCE
Initial Maximum Concentration (1): 708 (parts per billion)
Current Maximum Concentration (1): 280 (parts per billion)
Contaminant Concentration Type (2): Groundwater
Key Contaminant Concentration (2): XYLENE ISOMERS & ETHYL BENZENE
Initial Maximum Concentration (2): 1200 (parts per billion)
Current Maximum Concentration (2): 36 (parts per billion)
Contaminant Concentration Type (3): Groundwater
Key Contaminant Concentration (3): VOLATILE FUEL HYDROCARBONS
Initial Maximum Concentration (3): 9500 (parts per billion)
Plume in Length (FT): 0
Size Depth (FT): 0
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): 1300 (parts per billion)
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: YES
Total of Extraction Flow Rate: 0.0gpm
Estimated % of Contaminants Contained: 1-40%
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: 03/15/81
Soil Action Needed End Date: 04/15/81
Onsite Water Action Needed: YES
Onsite Water Action Needed Start Date: Not reported

DURA-BOND BEARING COMPANY (Continued) **1000143481**

Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	ND
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

FID:

Facility ID:	43006527	Regulate ID:	00001428
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 493-6546
Mail To:	Not reported P O BOX PALO ALTO, CA 94306		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

State UST:

Facility ID:	1428		
Tank Num:	1	Container Num:	1
Tank Capacity:	1000	Year Installed:	1960
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	GW Monitoring Well		
Contact Name:	JOHN A. MANGAN,JR., MFG. MANAG	Telephone:	(415) 493-6546
Total Tanks:	5	Region:	Not reported
Facility Type:	2	Other Type:	MANUFACTURING

DURA-BOND BEARING COMPANY (Continued) **1000143481**

Facility ID:	1428		
Tank Num:	2	Container Num:	2
Tank Capacity:	500	Year Installed:	1960
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	GW Monitoring Well		
Contact Name:	JOHN A. MANGAN,JR., MFG. MANAG	Telephone:	(415) 493-6546
Total Tanks:	5	Region:	Not reported
Facility Type:	2	Other Type:	MANUFACTURING

Facility ID:	1428		
Tank Num:	3	Container Num:	3
Tank Capacity:	5000	Year Installed:	1981
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	1/4 inches
Leak Detection:	GW Monitoring Well		
Contact Name:	JOHN A. MANGAN,JR., MFG. MANAG	Telephone:	(415) 493-6546
Total Tanks:	5	Region:	Not reported
Facility Type:	2	Other Type:	MANUFACTURING

Facility ID:	1428		
Tank Num:	4	Container Num:	4
Tank Capacity:	374	Year Installed:	1982
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	1/4 inches
Leak Detection:			
Contact Name:	JOHN A. MANGAN,JR., MFG. MANAG	Telephone:	(415) 493-6546
Total Tanks:	5	Region:	Not reported
Facility Type:	2	Other Type:	MANUFACTURING

Facility ID:	1428		
Tank Num:	5	Container Num:	5
Tank Capacity:	224	Year Installed:	1983
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	1/4 inches
Leak Detection:			
Contact Name:	JOHN A. MANGAN,JR., MFG. MANAG	Telephone:	(415) 493-6546
Total Tanks:	5	Region:	Not reported
Facility Type:	2	Other Type:	MANUFACTURING

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152 **WNW** **> 1** **5363** **Higher**	**COMSTOCK PROPERTY** **595 TENNYSON AVE** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S101309096** **N/A**

COMSTOCK PROPERTY (Continued) **S101309096**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Diesel		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	05/02/1995	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	04/12/1995	Release Date:	07/02/1993

LUST Region 2:

File Number:	43-1708	Lat/Long:	37.439133 / -122.141189
Region:	2		
Entered Date:	20-JUL-93	Last Review:	05/02/1995
Correspondence:	12-APR-95	Report Date:	07/02/1993
Case Number:	06S3W01F03	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	Not reported
How Stopped:	Close Tank	Stopped Date:	Not reported
Leak Source:	Unknown	Leak Cause:	Unknown
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Checked, all material in file has been reviewed.		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Diesel
Secondary Substance:	Not reported
Maximum Soil Concentration:	Not reported
Maximum Groundwater Impact:	All water analysis are non-detectable
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported

COMSTOCK PROPERTY (Continued) **S101309096**

Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 12-APR-95
Abatement: No Action Taken
Comments: ARCHIVED 5/17/96 CONTROL NO 120-070 SRC 0904720 070

LUST Region SC:

Facility ID:	06S3W01F03	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Kenneth Yee	Closed Date:	4/12/95
Transfer Date:	Not reported	Entry Date:	7/20/93
Case Rank:	S221		

South Bay Region 2:

Facility ID:	43-1708	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: -1 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported

COMSTOCK PROPERTY (Continued) **S101309096**

Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

AL153 **WSW** **> 1** **5386** **Higher**	**BLEIBLER IRON WORKS** **411 PAGE MILL RD** **PALO ALTO, CA 94306**	**LUST**	**1001133161** **N/A**

BLEIBLER IRON WORKS (Continued) **1001133161**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Regional Board		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	06/20/1997	Confirm Leak:	Not reported
Workplan:	09/11/1990	Prelim Assess:	10/31/1990
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	05/08/1995	Release Date:	02/13/1984

LUST Region 2:

File Number:	43-1820	Lat/Long:	37.424047 / -122.140191
Region:	2		
Entered Date:	Not reported	Last Review:	06/20/1997
Correspondence:	08-MAY-95	Report Date:	02/13/1984
Case Number:	06S3W12K01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/13/1984
How Stopped:	Close Tank	Stopped Date:	02/13/1984
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	2523
Maximum Groundwater Impact:	300
Current Benzene in Groundwater:	-1
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	20
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Regional Board
Case List:	FUEL
Enforcement Type:	Not reported
Enforcement Date:	Not reported
Responsible Party Search:	Not reported
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	11-SEP-90
Assessment Underway:	31-OCT-90
Pollution Characterization:	Not reported
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported
Monitoring Begun:	Not reported

BLEIBLER IRON WORKS (Continued) **1001133161**

Case Closed: 08-MAY-95
Abatement: No Action Taken
Comments: ARCHIVED 6/20/97 CONTROL NO 120-146 SRC 0904796 146

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
AL154 **WSW** **> 1** **5386** **Higher**	**BLEIBER IRON WORKS** **411 PAGE MILL RD** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S101440239** **N/A**

LUST Region SC:

Facility ID:	06S3W12K01	Region:	Santa Clara
Facility Status:	Sign Off by SFRWQCB	Facility Region:	SANTA CLARA
Case Worker:	RWQCB	Closed Date:	5/8/95
Transfer Date:	1/9/91	Entry Date:	Not reported
Case Rank:	O121		

South Bay Region 2:

Facility ID:	43-1820	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	3
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Gasoline
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	20 (Feet)
Maximum Soil Concentration of Contaminates:	2523 (parts per million)
Max Grndwater Concentration of Contaminates:	300 (parts per billion)
Benzene:	-1
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported

BLEIBER IRON WORKS (Continued) **S101440239**

Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID: 43S0742
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Type: Not reported
Lead: Regional Water Quality Board

Staff: HTK
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported

BLEIBER IRON WORKS (Continued) **S101440239**

Facility Status: CLOSED
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported

BLEIBER IRON WORKS (Continued) **S101440239**

Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization 10/11/91 SELF MONITORING REPORT
Comments very limited petroleum hydrocarbon release in middle of Hewlett-Packard 640 plume

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155
West
> 1
5464
Higher

OLD FIRE STATION
2253 PARK BLVD
PALO ALTO, CA

S Bay Reg. 2 **S101309092**
LUST **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	08/12/1992	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	12/29/1995	Release Date:	07/01/1993

LUST Region 2:

File Number:	43-1720	Lat/Long:	37.429624 / -122.143031
Region:	2		
Entered Date:	12-AUG-92	Last Review:	08/12/1992
Correspondence:	03-JAN-96	Report Date:	07/01/1993
Case Number:	06S3W12C01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	Not reported
How Stopped:	Close Tank	Stopped Date:	Not reported
Leak Source:	Unknown	Leak Cause:	Unknown
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		

OLD FIRE STATION (Continued) **S101309092**

Update Status: File archived
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: Not reported
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: 29-DEC-95
Abatement: No Action Taken
Comments: ARCHIVED 5/17/96 CONTROL NO 120-070 SRC 0904720 070

LUST Region SC:

Facility ID:	06S3W12C01	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	12/29/95
Transfer Date:	Not reported	Entry Date:	8/12/92
Case Rank:	S-22		

South Bay Region 2:

Facility ID:	43-1720	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported

OLD FIRE STATION (Continued) **S101309092**

Facility Description:	Not reported
Phase of Work by Responsible Party:	9
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Misc. Motor Vehicle Fuels
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported

OLD FIRE STATION (Continued) **S101309092**

Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

AM156 **SSW** **> 1** **5477** **Higher**	**PALO ALTO FIRESTONE** **3401 EL CAMINO REAL** **PALO ALTO, CA 94304**	**RCRIS-SQG** **FINDS** **LUST**	**1000324041** **CAD021189733**

RCRIS:

Owner: HELEN LUNDT
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 493-4844

Record Date: 09/01/1996

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

State LUST:

Facility Type INACTIVE
Cross Street: Not reported
Reg Board: San Francisco Bay Region
Qty Leaked: Not reported
Chemical: Gasoline
Lead Agency: Local Agency
Case Type: Soil only
Status: Signed off, remedial action completed or deemed unnecessary
Abate Method: No Action Taken - no action has as yet been taken at the site
Review Date: 06/07/1996
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported.
Remed Action: Not reported
Monitoring: Not reported
Close Date: 05/28/1996
Release Date: 10/21/1986

LUST Region 2:

PALO ALTO FIRESTONE (Continued) **1000324041**

File Number:	43-1030	Lat/Long:	37.419709 / -122.134427
Region:	2		
Entered Date:	05-JUL-89	Last Review:	06/07/1996
Correspondence:	28-MAY-96	Report Date:	10/21/1986
Case Number:	06S3W12R03	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	10/21/1986
How Stopped:	Close Tank	Stopped Date:	10/21/1986
Leak Source:	Tank	Leak Cause:	Structure Failure

Facility Status: Signed off, remedial action completed or deemed unnecessary
Notify: Not reported
Update Status: File archived
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.
Primary Substance: Gasoline
Secondary Substance: Gasoline
Maximum Soil Concentration: 1
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
- Leak Confirmed: Not reported
- Workplan Submitted: Not reported
- Assessment Underway: Not reported
- Pollution Characterization: Not reported
- Corrective Action Plan: Not reported
- Enforcement Action Date: Not reported
- Remediation Underway: Not reported
- Monitoring Begun: Not reported
- Case Closed: 28-MAY-96

Abatement: No Action Taken
Comments: ARCHIVED 11/1/96 CONTROL NO 120-121 SRC 0904771 121

AM157 **SSW** **> 1** **5477** **Higher**	**PALO ALTO FIRESTONE** **3401 EL CAMINO REAL** **PALO ALTO, CA**	**LUST**	**S103474371** **N/A**

PALO ALTO FIRESTONE (Continued) **S103474371**

LUST Region SC:

Facility ID:	06S3W12R03	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	5/28/96
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	S222		

AN158 **SSW** **> 1** **5497** **Higher**	**JOHNS AUTOMOTIVE** **3508 EL CAMINO REAL** **PALO ALTO, CA 94306**	**LUST**	**S103472949** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Misc. Motor Vehicle Fuels		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	05/15/1990	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	07/23/1997	Release Date:	06/25/1990

LUST Region 2:

File Number:	43-0206	Lat/Long:	37.418963 / -122.133448
Region:	2		
Entered Date:	15-MAY-90	Last Review:	05/15/1990
Correspondence:	23-JUL-97	Report Date:	06/25/1990
Case Number:	06S3W12R04	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	06/25/1990
How Stopped:	Close Tank	Stopped Date:	06/25/1990
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Misc. Motor Vehicle Fuels
Secondary Substance:	Not reported
Maximum Soil Concentration:	1000
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported

JOHNS AUTOMOTIVE (Continued) **S103472949**

Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: Not reported
Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 23-JUL-97
Abatement: No Action Taken
Comments: CLOSED 7/30 97 PER SCVWD.

AN159 **SSW** **> 1** **5497** **Higher**	**JOHN'S AUTOMOTIVE** **3508 EL CAMINO REAL** **PALO ALTO, CA**	**LUST**	**S103474372** **N/A**

LUST Region SC:

Facility ID:	06S3W12R04	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Linda Dorn	Closed Date:	7/23/97
Transfer Date:	Not reported	Entry Date:	5/15/90
Case Rank:	0231		

AN160 **SSW** **> 1** **5513** **Higher**	**COMBES AUTO REPAIR** **3585 EL CAMINO REAL** **PALO ALTO, CA 94306**	**UST** **S Bay Reg. 2** **Cortese** **LUST**	**U001595948** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	06/20/1995	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	06/20/1995	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	07/11/1986

LUST Region 2:

File Number:	43-0394	Lat/Long:	37.418967 / -122.133012
Region:	2		
Entered Date:	Not reported	Last Review:	06/20/1995
Correspondence:	15-JUN-95	Report Date:	07/11/1986
Case Number:	06S3W12R01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	04/17/1987
How Stopped:	Close Tank	Stopped Date:	04/17/1987
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		

COMBES AUTO REPAIR (Continued) **U001595948**

Notify: Not reported
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: 19632
Maximum Groundwater Impact: 22000
Current Benzene in Groundwater: 1100
Maximum Benzene Concentration: 970
Nuber of Wells: Not reported
Depth to Groundwater: 20.9
MTBE Contamination Level: -10
Maximum MTBE: 53
Interim Remediation: Yes
Interim Remediation Date: 29-DEC-89
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: Not reported
Pollution Characterization: 20-JUN-95
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Dispose (landfill) of soil
Comments: 8/93PSA CU FUND $20K 7/94 - XYL 1600 PPB

LUST Region SC:

Facility ID:	06S3W12R01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O321		

CORTESE:
Reg By: LTNKA
Reg Id: 43-0394
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0394	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported

COMBES AUTO REPAIR (Continued)

U001595948

Facility Description:	Not reported
Phase of Work by Responsible Party:	3
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Gasoline
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	20.9 (Feet)
Maximum Soil Concentration of Contaminates:	19632 (parts per million)
Max Grndwater Concentration of Contaminates:	22000 (parts per billion)
Benzene:	1100
Maximum Benzene:	970
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported

COMBES AUTO REPAIR (Continued) **U001595948**

Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

State UST:

Facility ID:	9785		
Tank Num:	1	Container Num:	1
Tank Capacity:	2000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	CHENG-CHING LIANG	Telephone:	(000) 000-0000
Total Tanks:	3	Region:	Not reported
Facility Type:	2	Other Type:	Not reported

Facility ID:	9785		
Tank Num:	2	Container Num:	1
Tank Capacity:	10000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	CHENG-CHING LIANG	Telephone:	(000) 000-0000
Total Tanks:	3	Region:	Not reported
Facility Type:	2	Other Type:	Not reported

Facility ID:	9785		
Tank Num:	3	Container Num:	2
Tank Capacity:	10000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	CHENG-CHING LIANG	Telephone:	(000) 000-0000
Total Tanks:	3	Region:	Not reported
Facility Type:	2	Other Type:	Not reported

AN161 **SSW** **> 1** **5517** **Higher**	**SHELL** **3601 EL CAMINO REAL** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **LUST**	**S100234851** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Remove Free Product - remove floating product from water table, Pump and Treat Ground Water - generally employed to remove dissolved contaminants		
Review Date:	11/25/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	11/05/1985
Pollution Char:	12/23/1985	Remed Plan:	Not reported
Remed Action:	09/25/1989	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	11/05/1985

LUST Region 2:

File Number:	43-1314	Lat/Long:	37.418844 / -122.132766
Region:	2		
Entered Date:	Not reported	Last Review:	11/25/1997
Correspondence:	14-SEP-93	Report Date:	11/05/1985
Case Number:	06S3W12R02	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	03/13/1990
How Stopped:	Close Tank	Stopped Date:	03/13/1990
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	3400
Maximum Groundwater Impact:	Free product in the well
Current Benzene in Groundwater:	11000
Maximum Benzene Concentration:	11000
Nuber of Wells:	Not reported
Depth to Groundwater:	22
MTBE Contamination Level:	-2
Maximum MTBE:	2500
Interim Remediation:	Yes
Interim Remediation Date:	25-SEP-89
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	05-NOV-85

SHELL (Continued) **S100234851**

Pollution Characterization: 23-DEC-85
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: 25-SEP-89
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Remove Free Product (e.g. skimmer used or vacuumed, pumped, etc.), Pump and Treat Ground Water
Comments: FP .15'

LUST Region SC:

Facility ID:	06S3W12R02	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O433		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1314
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1314	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 22 (Feet)
Maximum Soil Concentration of Contaminates: 3400 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: 11000
Maximum Benzene: 0

SHELL (Continued) **S100234851**

Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
AO162 **SW** **> 1** **5535** **Higher**	**CLOCKTOWER PLAZA/PREFORMED LINE** **600 HANSEN WAY** **PALO ALTO, CA**	**S Bay Reg. 2** **CA SLIC**	**S101641590** **N/A**

South Bay Region 2:

Facility ID:	43S0290	Staff:	HTK
Case Number:	Not reported	File Number:	2189.8377
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	ACTIVE		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	0
Size Depth (FT):	0
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported

CLOCKTOWER PLAZA/PREFORMED LINE (Continued) **S101641590**

Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

CLOCKTOWER PLAZA/PREFORMED LINE (Continued) **S101641590**

SLIC Region 2:
Facility ID: 43S0290
Region: 2
Facility Status: Active

163
WSW
> 1
5549
Higher

HEWLETT-PACKARD
395 PAGE MILL RD.
PALO ALTO, CA 92378

Notify 65

S100179147
N/A

NOTIFY 65:
Date Reported: Not reported Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 92378

AO164
SW
> 1
5562
Higher

COMMUNICATIONS AND POWER IND INC
607 HANSEN WY
PALO ALTO, CA 94304

RCRIS-SQG
RCRIS-TSD
HAZNET

1001023035
CAR000003863

RCRIS:
Owner: STANFORD UNIVERSITY
(415) 926-0224

Contact: MICHAEL KRAUS
(415) 424-5630

Record Date: 09/01/1996

Classification: Small Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	2504.00	D002	3678836.00
D007	8150.00	D018	363.00
D035	866.00	F002	1369.00
F003	2504.00	F005	503.00
F007	365200.00	P030	365200.00

Used Oil Recyc: No

Violation Status: No violations found

165
SW
> 1
5564
Higher

CARMEAN TRUST
411 ACACIA AVE
PALO ALTO, CA

S Bay Reg. 2
LUST

S101303762
N/A

CARMEAN TRUST (Continued) **S101303762**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Diesel		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	12/14/1992	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	04/22/1996	Release Date:	07/01/1993

LUST Region 2:

File Number:	43-1725	Lat/Long:	37.421928 / -122.138256
Region:	2		
Entered Date:	14-DEC-92	Last Review:	12/14/1992
Correspondence:	26-APR-96	Report Date:	07/01/1993
Case Number:	06S3W12K04	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	Not reported
How Stopped:	Close Tank	Stopped Date:	Not reported
Leak Source:	Unknown	Leak Cause:	Unknown
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Diesel
Secondary Substance:	Not reported
Maximum Soil Concentration:	550
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported

CARMEAN TRUST (Continued) **S101303762**

Pollution Characterization:	Not reported
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported
Monitoring Begun:	Not reported
Case Closed:	22-APR-96
Abatement:	No Action Taken
Comments:	CLOSED PER SCVWD 4/22/96.

LUST Region SC:

Facility ID:	06S3W12K04	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	4/22/96
Transfer Date:	Not reported	Entry Date:	12/14/92
Case Rank:	S121		

South Bay Region 2:

Facility ID:	43-1725	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type:	Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead:	Local Agency (Santa Clara Valley Water District
Facility Status:	Not reported
Discovered Date:	Not reported
Facility Description:	Not reported
Phase of Work by Responsible Party:	9
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Mineral Spirits
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	550 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported

CARMEAN TRUST (Continued) **S101303762**

Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

AO166 **SW** **> 1** **5578** **Higher**	**VARIAN ASSOCIATES HANSEN WAY** **611 HANSEN WAY (MAIL STOP A-12** **PALO ALTO, CA 94303**	**Ca. FID** **Cortese** **Cal-Sites** **UST**	**1000245623** **N/A**

VARIAN ASSOCIATES HANSEN WAY (Continued) **1000245623**

CAL-SITES:

Facility ID 43360086
Status: COM - CERTIFIED OPERATION AND MAINTENANCE, ALL PLANNED ACTIVITIES IMPLEMENTEDREMEDIATION CONTINUES
Status Date: 08/21/1997
Lead: DTSC
Region: 2 - BERKELEY
Branch: NC - NORTH COAST
File Name: Not reported
Status Name: CERTIFIED / OPERATION & MAINTENANCE
Lead Agancy: DEPT OF TOXIC SUBSTANCES CONTROL
NPL: Not Listed
SIC: 36 MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Facility Type: RESPONSIBLE PARTY
Facility Type Name: RP
Staff Member Responsible for Site: AWANGER
Supervisor Responsible for Site: KTOTH
Region Water Control Board: SF - SAN FRANCISCO BAY
Access: Controlled
Cortese: C
Hazardous Ranking Score: 41.74
Date Site Hazard Ranked: 10181988
Groundwater Contamination: Confirmed
No. of Contamintion Sources: 1.00000
Lat/Long: 37.00000 25.00000´ 4.00000 / 122.00000 8.00000´ 25.00000
Lat/long Method: TEALE ADDRESS MATCH
State Assembly District Code: 21
State Senate District: 11

CORTESE:

Reg By: CALSI
Reg Id: 43360086
Region: CORTESE

FID:

Facility ID:	43012189	Regulate ID:	00004142
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 493-4000
Mail To:	Not reported 611 HANSEN WAY N MS-A12 PALO ALTO, CA 94303		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

VARIAN ASSOCIATES HANSEN WAY (Continued) **1000245623**

State UST:

Facility ID:	4142		
Tank Num:	1	Container Num:	1
Tank Capacity:	2000	Year Installed:	1967
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	JOHN JOHNSON	Telephone:	(415) 493-4000
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	ELECTRICAL COMPONENT

Facility ID:	4142		
Tank Num:	2	Container Num:	2
Tank Capacity:	10000	Year Installed:	1974
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	JOHN JOHNSON	Telephone:	(415) 493-4000
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	ELECTRICAL COMPONENT

A0167 **SW** **> 1** **5578** **Higher**	**VARIAN** **611 HANSEN WAY** **PALO ALTO, CA 94303**	**Ca. BEP** **CA SLIC**	**S100833273** **N/A**

VARIAN (Continued) **S100833273**

SLIC Region 2:

Facility ID:	43S0216
Region:	2
Facility Status:	Active

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168 **WSW** **> 1** **5678** **Higher**	**PALO ALTO TIRE** **306 CAMBRIDGE AVE** **PALO ALTO, CA 94306**	**UST** **S Bay Reg. 2** **Cortese** **LUST**	**U001595965** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	06/30/1989	Confirm Leak:	Not reported
Workplan:	12/20/1990	Prelim Assess:	Not reported
Pollution Char:	06/30/1998	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	03/27/1986

LUST Region 2:

File Number:	43-1032	Lat/Long:	37.4284 / -122.14354
Region:	2		
Entered Date:	05-JUL-89	Last Review:	06/30/1989
Correspondence:	14-OCT-93	Report Date:	03/27/1986
Case Number:	06S3W12E01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	03/27/1986
How Stopped:	Close Tank	Stopped Date:	03/27/1986
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	3000
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	-500
Maximum MTBE:	-500
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

PALO ALTO TIRE (Continued) **U001595965**

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	20-DEC-90
Assessment Underway:	Not reported
Pollution Characterization:	30-JUN-98
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported
Monitoring Begun:	Not reported
Case Closed:	Not reported

Abatement: No Action Taken

LUST Region SC:

Facility ID:	06S3W12F01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O321		

CORTESE:

Reg By:	LTNKA
Reg Id:	43-1032
Region:	CORTESE

South Bay Region 2:

Facility ID:	43-1032	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	3
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Gasoline
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	3000 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)

PALO ALTO TIRE (Continued) **U001595965**

Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

PALO ALTO TIRE (Continued) **U001595965**

State UST:

Facility ID:	9924		
Tank Num:	1	Container Num:	0000000001
Tank Capacity:	550	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	None		
Contact Name:	JOHN NEFSTAD	Telephone:	(415) 326-5913
Total Tanks:	0	Region:	Not reported
Facility Type:	2	Other Type:	TIRES & BRAKES

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169 **SW** **> 1** **5691** **Higher**	**PALO ALTO NISSAN** **3001 EL CAMINO REAL** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S102434944** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Waste Oil		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	01/22/1992	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	01/22/1992	Release Date:	06/10/1986

LUST Region 2:

File Number:	43-1031	Lat/Long:	37.422146 / -122.139156
Region:	2		
Entered Date:	Not reported	Last Review:	01/22/1992
Correspondence:	22-JAN-92	Report Date:	06/10/1986
Case Number:	Not reported	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	06/10/1986
How Stopped:	Close Tank	Stopped Date:	06/10/1986
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Waste Oil
Secondary Substance:	Unleaded Gasoline
Maximum Soil Concentration:	372
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported

PALO ALTO NISSAN (Continued) **S102434944**

Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: Yes
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: 22-JAN-92
Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 5/17/96 CONTROL NO 120-060 SRC 0904710 060

LUST Region SC:

Facility ID:	06S3W12K02	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Case Closed	Closed Date:	1/22/92
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	S122		

South Bay Region 2:

Facility ID:	43-1031	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Waste Oil
Secondary Substance Spilled: Unleaded Gasoline
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported

PALO ALTO NISSAN (Continued) **S102434944**

Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	372 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported

PALO ALTO NISSAN (Continued) **S102434944**

Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

AP170 **WNW** **> 1** **5781** **Higher**	**RIGGS RESIDENCE** **634 LOWELL AVE** **PALO ALTO, CA**	**LUST**	**S103474347** **N/A**

LUST Region SC:

Facility ID:	06S3W01F02	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Adele Shepherd	Closed Date:	4/24/96
Transfer Date:	Not reported	Entry Date:	6/8/92
Case Rank:	0421		

AP171 **WNW** **> 1** **5781** **Higher**	**RIGGS PROPERTY** **634 LOWELL AVE** **PALO ALTO, CA**	**S Bay Reg. 2** **HAZNET** **LUST**	**S101309088** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	02		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Pump and Treat Ground Water - generally employed to remove dissolved contaminants		
Review Date:	06/08/1992	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	03/29/1991
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	04/24/1996	Release Date:	08/14/1991

LUST Region 2:

File Number:	43-0758	Lat/Long:	37.440398 / -122.141662
Region:	2		
Entered Date:	08-JUN-92	Last Review:	06/08/1992
Correspondence:	26-APR-96	Report Date:	08/14/1991
Case Number:	06S3W01F02	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	08/30/1991
How Stopped:	Close Tank	Stopped Date:	08/30/1991
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		

RIGGS PROPERTY (Continued) **S101309088**

Case Type: Other ground water or surface water is affected or threatened
Primary Substance: 02
Secondary Substance: Not reported
Maximum Soil Concentration: 29000
Maximum Groundwater Impact: Free product in the well
Current Benzene in Groundwater: -1
Maximum Benzene Concentration: Not reported
Nuber of Wells: 3
Depth to Groundwater: 13
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: Yes
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Not reported
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: 29-MAR-91
Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 24-APR-96
Abatement: Excavate and Dispose (landfill) of soil, Pump and Treat Ground Water
Comments: CLOSED PER SCVWD 3/26/96.AKA JOHNSON POPERTY

South Bay Region 2:
Facility ID: 43-0758
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Staff: Not reported
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported
Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Diesel
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported

RIGGS PROPERTY (Continued) **S101309088**

Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	13' (Feet)
Maximum Soil Concentration of Contaminates:	29000 (parts per million)
Max Grndwater Concentration of Contaminates:	9999999 (parts per billion)
Benzene:	-1
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported

RIGGS PROPERTY (Continued) **S101309088**

Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
172 **SW** **> 1** **5794** **Higher**	**STANFORD CLEANERS** **2875 EL CAMINO** **PALO ALTO, CA 94306**	**RCRIS-SQG** **FINDS** **CERC-NFRAP** **UST** **Ca. FID** **S Bay Reg. 2** **Cortese** **HAZNET** **CA SLIC** **LUST**	**1000314828** **CAD028879765**

CERCLIS-NFRAP Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not reported
Ownership Status:	Unknown	NPL Status:	Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	19860501
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19871101

RCRIS:

Owner:	STANFORD CLEANERS (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (415) 322-2540
Record Date:	09/01/1996
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Solvents		
Lead Agency:	Regional Board		
Case Type:	Undefined		
Status:	Post remedial action monitoring in progress		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	05/11/1988	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	05/11/1988
Close Date:	Not reported	Release Date:	05/11/1988

STANFORD CLEANERS (Continued) **1000314828**

HAZNET:

Year:	Not reported		
Gepaid:	CAD028879765	Tepaid:	CAT000613893
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	9
Tsd Name:	SAFETY-KLEEN CORP (7-088-06)		
Tsd Address:	10625 HICKSON ST#A EL MONTE		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	741		
Disposal Method:	D99		

Year:	Not reported		
Gepaid:	CAD028879765	Tepaid:	CAT000613893
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	64
Tsd Name:	SAFETY-KLEEN CORP (7-088-06)		
Tsd Address:	10625 HICKSON ST#A EL MONTE		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	741		
Disposal Method:	H01		

Year:	Not reported		
Gepaid:	CAD028879765	Tepaid:	CAT000613893
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	9
Tsd Name:	SAFETY-KLEEN CORP (7-088-06)		
Tsd Address:	10625 HICKSON ST#A EL MONTE		
Tsd County	Los Angeles		
Mailing Address:	Not reported		
Category:	741		
Disposal Method:	UNK		

CORTESE:

Reg By: LTNKA
Reg Id: 43-1380
Region: CORTESE

Reg By: LTNKA
Reg Id: 43-1928
Region: CORTESE

Reg By: LTNKA
Reg Id: 43-1383
Region: CORTESE

Reg By: LTNKA
Reg Id: 43-1381
Region: CORTESE

Reg By: LTNKA
Reg Id: 43-1385
Region: CORTESE

STANFORD CLEANERS (Continued) **1000314828**

Reg By: LTNKA
Reg Id: 43-1382
Region: CORTESE

Reg By: LTNKA
Reg Id: 43-1384
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1928	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: There is insufficient data or information to determine whether groundwater and/or soil has been impacted
Lead: Regional Board
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	8
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Solvents
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported

STANFORD CLEANERS (Continued) **1000314828**

Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID: 43S0121
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Type: Not reported
Lead: Not reported
Facility Status: Not reported
Discovered Date: Not reported

Staff: Not reported
File Number: 2189.8148
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported

Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED

STANFORD CLEANERS (Continued) **1000314828**

Problem Caused by UST:	Yes
Contaminant Concentration Type (1):	Groundwater
Key Contaminant Concentration (1):	140 F SOLVENT
Initial Maximum Concentration (1):	43 (parts per billion)
Current Maximum Concentration (1):	<50 (parts per billion)
Contaminant Concentration Type (2):	Groundwater
Key Contaminant Concentration (2):	TRANS-1,2-DICHLOROETHENE
Initial Maximum Concentration (2):	460 (parts per billion)
Current Maximum Concentration (2):	340 (parts per billion)
Contaminant Concentration Type (3):	Groundwater
Key Contaminant Concentration (3):	1,1,1-TRICHLOROETHANE
Initial Maximum Concentration (3):	170 (parts per billion)
Plume in Length (FT):	0
Size Depth (FT):	0
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	300 (parts per billion)
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	NOT DETERMINED
Total of Extraction Flow Rate:	0.0gpm
Estimated % of Contaminants Contained:	NOT APP
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	ND
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	ND
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported

STANFORD CLEANERS (Continued) **1000314828**

Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID:	43S0121	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8148
Last Update:	07/18/90	Case Type:	TK
RWQCB Initials:	HTK	EPA Contact:	NONE
DOHS Initials:	Not reported	Map Number:	U14-06S03W12
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	ACTIVE		
Discovered Date:	04/30/82		

Facility Description: DRY CLEANERS
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Groundwater
Key Contaminant Concentration (1): 140 F SOLVENT
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Groundwater
Key Contaminant Concentration (2): TRANS-1,2-DICHLOROETHENE
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Groundwater
Key Contaminant Concentration (3): 1,1,1-TRICHLOROETHANE
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): 0
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported

STANFORD CLEANERS (Continued) **1000314828**

Soil Action Needed:	NOT DETERMINED
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	LEAKING WASTE SOLVENT TANK
Contaminant Concentration as of:	AS_OF:_04/01/88
Contaminant Concentration (1):	YES
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	43 (parts per billion)
Current Level Concentration (1):	<50 (parts per billion)
Contaminant Concentration (2):	YES
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	460 (parts per billion)
Current Level Concentration (2):	340 (parts per billion)
Contaminant Concentration (3):	YES
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	170 (parts per billion)
Current Level Concentration (3):	300 (parts per billion)
Number of Municipal Wells:	0
Number of Private Wells:	0
Closure Name:	NONE
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	NOT DETERMINED
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	NOT DETER
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	NONE
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported

Immediate Response Actions:
1) INSTALL GROUNDWATER WELL.
Remediation: Not reported
Characterization FOUND CHLORINATED HYDROCARBONS IN 8/85 SAMPLING, BUT BELIEVED TO BE COMING FROM OFFSITE.

STANFORD CLEANERS (Continued) **1000314828**

Comments UNDERGROUND TANK REMOVED, ALONG WITH 360 CUBIC FEET OF SOIL. SOME CONTAMINATED SOIL REMAINS. SEMI-ANNUAL/ANNUAL MONITORING OF WELL RECOMMENDED.

FID:

Facility ID:	43006379	Regulate ID:	00020402
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 322-2540
Mail To:	Not reported 2875 EL CAMINO REAL PALO ALTO, CA 94306		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

STANFORD CLEANERS (Continued) **1000314828**

SLIC Region 2:

Facility ID:	43S0121		
Region:	2		
Facility Status:	Active		

State UST:

Facility ID:	20402		
Tank Num:	1	Container Num:	0001
Tank Capacity:	550	Year Installed:	1959
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	GW Monitoring Well		
Contact Name:	FRED FUJIKAWA OWNER	Telephone:	(415) 322-2540
Total Tanks:	1	Region:	Not reported
Facility Type:	2	Other Type:	DRY CLEANER

AQ173
SSW
> 1
5813
Higher

CO-OPT SERVICE STATION
3897 EL CAMINO REAL
PALO ALTO, CA

LUST

S103474294
N/A

LUST Region SC:

Facility ID:	06S2W18D02	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Adele Shepherd	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	2/20/92
Case Rank:	O332		

AQ174
SSW
> 1
5813
Higher

CO OPT GAS
3897 EL CAMINO REAL
PALO ALTO, CA

S Bay Reg. 2
Cortese
LUST

S102428158
N/A

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	02/20/1992	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	02/20/1992	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	06/18/1991

LUST Region 2:

File Number:	43-0383	Lat/Long:	37.417019 / -122.129295
Region:	2		
Entered Date:	20-FEB-92	Last Review:	02/20/1992
Correspondence:	03-JUN-93	Report Date:	06/18/1991
Case Number:	06S2W18D02	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	07/19/1991
How Stopped:	Close Tank	Stopped Date:	07/19/1991
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		

CO OPT GAS (Continued) **S102428158**

Notify: 0
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: 1000
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: 2500
Maximum MTBE: 10000
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: Not reported
Pollution Characterization: 20-FEB-92
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: No Action Taken
Comments: CURRENT MTBE DATE: 10/1/97

CORTESE:
Reg By: LTNKA
Reg Id: 43-0383
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0383	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No

CO OPT GAS (Continued) **S102428158**

Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 1000 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported

CO OPT GAS (Continued) **S102428158**

Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

AR175 **WNW** **> 1** **5901** **Higher**	**BARON PROPERTY** **521 LOWELL AVE** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S102424954** **N/A**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Misc. Motor Vehicle Fuels		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	03/01/1993	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	02/28/1992	Release Date:	02/28/1992

LUST Region 2:

File Number:	43-0425	Lat/Long:	37.439218 / -122.143122
Region:	2		
Entered Date:	01-MAR-93	Last Review:	03/01/1993
Correspondence:	28-FEB-92	Report Date:	02/28/1992
Case Number:	Not reported	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/28/1992
How Stopped:	Close Tank	Stopped Date:	02/28/1992
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		

BARON PROPERTY (Continued) **S102424954**

Case Type: Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.
Primary Substance: Misc. Motor Vehicle Fuels
Secondary Substance: Not reported
Maximum Soil Concentration: Not reported
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: Yes
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: 28-FEB-92
Abatement: Excavate and Dispose (landfill) of soil
Comments: ARCHIVED 5/17/96 CONTROL NO 120-052 SRC 0904702 052

South Bay Region 2:
Facility ID: 43-0425
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Staff: Not reported
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported
Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported

BARON PROPERTY (Continued) **S102424954**

Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported

BARON PROPERTY (Continued) **S102424954**

Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

AR176
WNW
> 1
5901
Higher

BARON RESIDENCE
521 LOWELL AVE
PALO ALTO, CA

LUST

S103474346
N/A

LUST Region SC:

Facility ID:	06S3W01F01	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Case Closed	Closed Date:	2/28/92
Transfer Date:	Not reported	Entry Date:	3/4/92
Case Rank:	S---		

AS177
SW
> 1
5919
Higher

MOBIL SERVICE STATION
2780 EL CAMINO REAL
PALO ALTO, CA 94306

UST
LUST

U001595961
N/A

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Preliminary site assessment workplan submitted		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	11/25/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	12/11/1992	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	12/11/1992

LUST Region 2:

File Number:	43-0150	Lat/Long:	37.423095 / -122.141412
Region:	2		
Entered Date:	09-APR-93	Last Review:	11/25/1997
Correspondence:	31-AUG-95	Report Date:	12/11/1992
Case Number:	06S3W12L01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/11/1992
How Stopped:	Close Tank	Stopped Date:	12/11/1992
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Preliminary site assessment workplan submitted		
Notify:	0		

MOBIL SERVICE STATION (Continued) **U001595961**

Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: Not reported
Maximum Groundwater Impact: Free product in the well
Current Benzene in Groundwater: -1
Maximum Benzene Concentration: 2000
Nuber of Wells: Not reported
Depth to Groundwater: 11
MTBE Contamination Level: 68
Maximum MTBE: 30000
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: Not reported
Pollution Characterization: 11-DEC-92
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: No Action Taken
Comments: PART OF HP640SUPERFNDSITE-PAGE MILL RD.SEE JH/HK'S FILE IN SBT. MTBE CONCENTRATION UPDATED 11/25/97

LUST Region SC:

Facility ID:	06S3W12L01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Linda Dorn	Closed Date:	Not reported
Transfer Date:	6/5/90	Entry Date:	Not reported
Case Rank:	O323		

State UST:

Facility ID:	39546		
Tank Num:	1	Container Num:	1
Tank Capacity:	4000	Year Installed:	1959
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test		
Contact Name:	F. NAJMY	Telephone:	(415) 858-1422
Total Tanks:	5	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL S

MOBIL SERVICE STATION (Continued) **U001595961**

Facility ID:	39546		
Tank Num:	2	Container Num:	2
Tank Capacity:	4000	Year Installed:	1959
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test		
Contact Name:	F. NAJMY	Telephone:	(415) 858-1422
Total Tanks:	5	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL S

Facility ID:	39546		
Tank Num:	3	Container Num:	3
Tank Capacity:	4000	Year Installed:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test		
Contact Name:	F. NAJMY	Telephone:	(415) 858-1422
Total Tanks:	5	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL S

Facility ID:	39546		
Tank Num:	4	Container Num:	4
Tank Capacity:	4000	Year Installed:	1963
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test		
Contact Name:	F. NAJMY	Telephone:	(415) 858-1422
Total Tanks:	5	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL S

Facility ID:	39546		
Tank Num:	5	Container Num:	0000000001
Tank Capacity:	280	Year Installed:	Not reported
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	F. NAJMY	Telephone:	(415) 858-1422
Total Tanks:	5	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL S

AS178	**BP MOBIL**	**S Bay Reg. 2**	**S102425627**
SW	**2780 EL CAMINO REAL**	**Cortese**	**N/A**
> 1	**PALO ALTO, CA**	**HAZNET**	
5919		**CA SLIC**	
Higher			

CORTESE:

Reg By:	LTNKA
Reg Id:	43-0150
Region:	CORTESE

South Bay Region 2:

Facility ID:	43-0150	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Other ground water or surface water is affected or threatened		

BP MOBIL (Continued) **S102425627**

Lead: Regional Board
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 11 (Feet)
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: -1
Maximum Benzene: 2000
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported

BP MOBIL (Continued) **S102425627**

Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

BP MOBIL (Continued) **S102425627**

SLIC Region 2:
Facility ID: 43S0291
Region: 2
Facility Status: Active

179
North
> 1
5942
Lower

S/B US 101 NORTH OF EMBARCADERO
EAST PALO ALTO, CA 94303

CHMIRS

S100280136
N/A

CHMIRS:

OES Control Number:	9100420	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	WATER		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	0
Environmental Contamination:	None Reported	Property Use:	Freeway
Incident Date:	13-MAY-91	Date Completed:	13-MAY-91

AS180
WSW
> 1
5998
Higher

GREEN WORLD NURSERY
2711 EL CAMINO REAL
PALO ALTO, CA

S Bay Reg. 2
Cortese
LUST

S101542451
N/A

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Undefined		
Status:	Preliminary site assessment workplan submitted		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	02/27/1992	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	03/14/1991

LUST Region 2:

File Number:	43-1723	Lat/Long:	37.423525 / -122.141758
Region:	2		
Entered Date:	27-FEB-92	Last Review:	02/27/1992
Correspondence:	01-JUL-93	Report Date:	03/14/1991
Case Number:	06S3W12L02	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	Not reported
How Stopped:	Close Tank	Stopped Date:	Not reported
Leak Source:	Unknown	Leak Cause:	Unknown
Facility Status:	Preliminary site assessment workplan submitted		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	There is insufficient data or information to determine whether groundwater and/or soil has been impacted.		

GREEN WORLD NURSERY (Continued) **S101542451**

Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: Not reported
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: No Action Taken
Comments: CASE PER SCVWD 7/93 QTR RPT

LUST Region SC:

Facility ID:	06S3W12L02	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Lane Davis	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	2/27/92
Case Rank:	U231		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1723
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1723	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 0
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No

GREEN WORLD NURSERY (Continued) **S101542451**

Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported

GREEN WORLD NURSERY (Continued) **S101542451**

Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID:	43S0374	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	03/19/91	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Not reported
Lead: Regional Water Quality Board
Facility Status: INACTIVE
Discovered Date: 07/19/90
Facility Description: PLANT NURSERY
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Soil
Key Contaminant Concentration (1): TPH-G
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): 0
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: NOT DETERMINED
Total of Extraction Flow Rate: Not reported

GREEN WORLD NURSERY (Continued) **S101542451**

Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	TANK LEAK
Contaminant Concentration as of:	AS_OF:_07/31/90
Contaminant Concentration (1):	YES
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	2800000 (parts per billion)
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	0
Number of Private Wells:	0
Closure Name:	NONE
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	NOT DETERMINED
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	NOT DETER
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	NONE
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported

Immediate Response Actions:
1) NO ACTION TAKEN.

Remediation:	Not reported
Characterization	CONTAMINATION FOUND ON TANK REMOVAL.
Comments	2800 PPM TPH-G.

AS181 **WSW** **> 1** **5998** **Higher**	**2711 EL CAMINO REAL** **PALO ALTO, CA 94306**	**CHMIRS**	**S100222103** **N/A**

(Continued) **S100222103**

CHMIRS:

OES Control Number:	9990680	DOT ID:	1270
DOT Hazard Class:	Flammable liquid		
Chemical Name:	OIL		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	30
Environmental Contamination:	Ground	Property Use:	Vacant Lot
Incident Date:	06-MAY-88	Date Completed:	06-MAY-88

Map ID	Site	Database(s)	EDR ID / EPA ID
AS182 **SW** **> 1** **6007** **Higher**	**HEWLETT-PACKARD OPTOELECTRIC DIVISION** **640 PAGE MILL ROAD** **PALO ALTO, CA 94304**	**Ca. BEP**	**S100833464** **N/A**

Map ID	Site	Database(s)	EDR ID / EPA ID
AS183 **SW** **> 1** **6007** **Higher**	**HEWLETT-PACKARD (620-640 PAGE MILL ROAD)** **620 - 640 PAGE MILL RD.** **PALO ALTO, CA 94304**	**CERCLIS** **S Bay Reg. 2** **CA SLIC**	**1000281842** **CAD980884209**

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Private	NPL Status:	Currently on the Final NPL
Contact:	ANN FICHER	Contact Tel:	(415) 744-2321
Contact:	Three Guest	Contact Tel:	Not reported
Contact:	John Kemmerer	Contact Tel:	Not reported
Contact:	WILLIAM LEWIS	Contact Tel:	Not reported
Contact:	Marie Lacey	Contact Tel:	(415) 744-2234
Contact:	Matthew Mitguard	Contact Tel:	Not reported
Contact:	Greg Pennington	Contact Tel:	(415) 744-2372
Contact:	David Seter	Contact Tel:	(415) 744-2400

Site Description: The Hewlett-Packard 620-640 Page Mill Road (HP-640 PMR) Superfund site is located in Palo Alto, California within the Stanford Research Park, a light-industrial and research area owned by Stanford University. Leaks from an underground waste solvent storage tank have resulted in soil and ground water contamination at the site. Land use in the vicinity of the site is predominantly commercial and industrial, with smaller areas of residential development. The nearest residential areas are locat ed approximately 1/8 mile northeast of the facility. Five municipal backup supply wells drawing from a deep aquifer are within three miles of the site but are not currently used. All of the City of Palo Alto drinking water is supplied by the San Fr ancisco Water Department's Hetch Hetchy System. The HP-640 PMR site is located near the western margin of the Santa Clara Valley. The valley surface in this area is a gently sloping alluvial plain that extends northeast from the foothills to San Francisco Bay, located approximately three miles to the northeast. The area is underlain by interbedded alluvial fan deposits and fine-grained floodplain deposits. The only surface water in the vicinity of HP-640 PMR is Matadero Creek, located to the east of the site. Matadero Creek is an intermittent stream that originates near the Los Altos Hills and flows in a northerly direction through the residential, commercial and industrial areas of Palo Alto. Two areas have been designated as ground water study areas: the California Olive Emerson (COE) Study Area (named by the bordering streets) and the Perimeter Area which

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

represents the limits of the known ground water contamination plume. The COE and Perimeter Areas, are underlain by two primary aquifers, the upper A Aquifer and the lower B Aquifer. Each of these two aquifers contain distinct sand zones. The A Aquifer extends up to 55 feet below ground surface, and groundwater is first encountered at depths between 15 a
nd 30 feet. Within the A Aquifer, the A1 Upper (A1U) Zone is generally found between the depths of 15 and 30 feet, the A1 Zone between 30 and 40 feet, and the A2 Zone between 40 and 55 feet. The general groundwater gradient in the A Aquifer is to t he north-northeast. Within the B Aquifer, the B1 Zone occurs below an approximate depth of 60 feet below ground surface. This zone is typically about 10 feet thick. Where encountered, the B2 Zone begins at approximately 85 feet below the surface a nd is between six and 33 feet thick. The Oregon Expressway Underpass (OEU) serves as a subsurface roadway beneath the Southern Pacific Railroad tracks, Alma Street and Park Boulevard. The underpass, built in 1958, extends 24 feet below ground s urface into the aquifer A1U Zone. A dewatering system installed beneath the underpass controls natural groundwater inflow and surface runoff. This dewatering appears to affect groundwater flow in the A1U, A1 and A2 Zones, and does not allow contami nants to bypass the subdrain to the north. During low flow periods, the average rate of groundwater discharge is typically 140 gallons per minute (gpm), with total Volatile Organic Compounds (VOCs) concentrations ranging between 200 and 300 parts per billion (ppb). This water is discharged to the City of Palo Alto sanitary sewer. The discharge during high flow periods consists of both surface water and groundwater; excess is pumped via auxiliary pumps and discharged to the City of Palo Alto storm drain system.
Hewlett Packard Company (HP) manufactured gallium arsenide- and silicon-based semiconductors at the property from 1962 until operations ceased in 1986. The facility consisted of two main buildings (#10 and #11) and a storage building. Both building s have since been demolished and the site redeveloped for an office building with an underground garage. Site investigation began in 1981 after a leaking 1000-gallon underground solvent storage tank was discovered between Building 11 and the stor age building. Sources of metals were found in Building 10, associated with acid neutralization pumps, piping and operations areas in the building. The primary contaminants detected at the site were trichloroethene (TCE); 1,1,1-trichloroethane (1,1, 1-TCA); tetrachloroethene (PCE); gallium; and arsenic.
Interim Remedial Measures (IRMs) have been conducted since 1982. Soil excavations at the HP-640 PM) site between 1987 and 1992 removed approximately 7,700 cubic yards of contaminated soil to Class I landfills and approximately 3,000 cubic yards to Class III landfills. Additional areas of the site were also excavated to remove above-background concentrations of arsenic, gallium and several other metals. Groundwater remediation at HP-64 0 PMR was initiated in 1982 for seven months; extraction was restarted in 1987 and has continued to the present. On June 24, 1988, the U.S. EPA proposed adding the HP-640 PMR site to the National Priorities List (NPL), subject to the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). On February 1, 1990, the HP-640 PMR facility was added to the NPL. Since the listing, the groundwater contamination plume emanating from the HP-640 PMR site was found to be commingled in part with groundwater contamination plumes associated with other potential sources beyond the HP-640 PMR facility

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

boundaries. Pursuant to the South Bay Multi-Site Cooperative Agreement and the South Bay Groundwater Contamination Enforcement Agreement entered into by the California Regional Water Quality Control Board (RWQCB), EPA and the California Department of Toxic Substances Control (DTSC) (formerly the California Department of Health Services (DHS)), th e RWQCB has been acting as lead regulatory agency for the site. In July 1994, the RWQCB released a Proposed Plan fact sheet for the site that described the proposed remedy for the site. A public notice was published allowing 30 days for public co mment on the RI/FS and Proposed Plan. A public meeting was held on July 26, 1994.

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	19840701
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19840701
Assessment:	HRS PACKAGE	Completed:	19870601
Assessment:	SITE INSPECTION	Completed:	19870601
Assessment:	PROPOSAL TO NPL	Completed:	19880624
Assessment:	REMOVAL ASSESSMENT	Completed:	19890803
Assessment:	FINAL LISTING ON NPL	Completed:	19900221
Assessment:	NPL RP SEARCH	Completed:	19900330
Assessment:	REMOVAL ASSESSMENT	Completed:	19900814
Assessment:	STATE ORDER	Completed:	19910315
Assessment:	ADMIN/VOLUNTARY COST RECOVERY	Completed:	19920618
Assessment:	REMOVAL ASSESSMENT	Completed:	19921229
Assessment:	PRP RD	Completed:	19950123
Assessment:	PRP RI/FS	Completed:	19950324
Assessment:	RECORD OF DECISION	Completed:	19950324
Assessment:	ADMIN/VOLUNTARY COST RECOVERY	Completed:	19960118
Assessment:	PRP RA	Completed:	19961211
Assessment:	ADMINISTRATIVE RECORDS	Completed:	Not reported
Assessment:	INITIAL REMEDIAL MEASURE	Completed:	Not reported
Assessment:	TECHNICAL ASSISTANCE GRANT	Completed:	Not reported
Assessment:	MANAGEMENT ASSISTANCE	Completed:	Not reported

CERCLIS Site Status:
Not reported

CERCLIS Alias Name(s):
HP 640 PAGE MILL ROAD
HEWLETT PACKARD/640
HEWLETT PACKARD/640
HEWLETT PACKARD I PALO ALTO

South Bay Region 2:

Facility ID:	Not reported	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Regional Board
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 7
National Priority List: NOT REPORTED
Primary Substance Spilled: Waste Oil
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	10 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

SLIC Region 2:

Facility ID:	43S0051
Region:	2
Facility Status:	Active

AT184 **South** **> 1** **6036** **Higher**	**CHEVRON #9-3173** **3972 EL CAMINO REAL** **PALO ALTO, CA**	**LUST**	**S103474293** **N/A**

LUST Region SC:

Facility ID:	06S2W18D01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Donna Mena	Closed Date:	Not reported
Transfer Date:	7/12/90	Entry Date:	Not reported
Case Rank:	O333		

AT185 **South** **> 1** **6036** **Higher**	**CHEVRON** **3972 EL CAMINO REAL** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **HAZNET** **LUST**	**S102426861** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)		
Review Date:	11/21/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	05/29/1987
Pollution Char:	11/30/1987	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	04/21/1987

LUST Region 2:

File Number:	43-0325	Lat/Long:	37.415846 / -122.127482
Region:	2		
Entered Date:	Not reported	Last Review:	11/21/1997
Correspondence:	06-MAY-93	Report Date:	04/21/1987
Case Number:	06S2W18D01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/27/1984
How Stopped:	Close Tank	Stopped Date:	12/27/1984
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		
Primary Substance:	Gasoline		
Secondary Substance:	Not reported		
Maximum Soil Concentration:	1200		

CHEVRON (Continued) **S102426861**

Maximum Groundwater Impact: 61000
Current Benzene in Groundwater: 1200
Maximum Benzene Concentration: 1200
Nuber of Wells: Not reported
Depth to Groundwater: 16
MTBE Contamination Level: 25
Maximum MTBE: 64
Interim Remediation: Yes
Interim Remediation Date: 27-DEC-84
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: 29-MAY-87
  Pollution Characterization: 30-NOV-87
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: Excavate and Treat soil. (e.g. aeration, biodegradation, etc.)
Comments: XCG, LAST 1/4-INCREASED TPHC

CORTESE:
Reg By: LTNKA
Reg Id: 43-0325
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0325	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported

CHEVRON (Continued) **S102426861**

Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	16.0 (Feet)
Maximum Soil Concentration of Contaminates:	1200 (parts per million)
Max Grndwater Concentration of Contaminates:	61000 (parts per billion)
Benzene:	1200
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported

CHEVRON (Continued) **S102426861**

Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

AU186 **South** **> 1** **6356** **Higher**	**BEACON STATION #463** **4073 EL CAMINO REAL** **PALO ALTO, CA 94306**	**UST** **S Bay Reg. 2** **Cortese** **LUST**	**U001595945** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Pump and Treat Ground Water - generally employed to remove dissolved contaminants, Vent Soil - bore holes in soil to allow volatilization of contaminants		
Review Date:	05/13/1998	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	05/13/1998	Remed Plan:	Not reported
Remed Action:	12/01/1995	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	02/08/1988

LUST Region 2:

File Number:	43-0160	Lat/Long:	37.41515 / -122.126178
Region:	2		
Entered Date:	09-JUN-88	Last Review:	01/11/1999
Correspondence:	29-OCT-98	Report Date:	02/08/1988
Case Number:	06S2W18C01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	06/09/1988
How Stopped:	Close Tank	Stopped Date:	06/09/1988
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	Not reported
Maximum Groundwater Impact:	62000
Current Benzene in Groundwater:	2400
Maximum Benzene Concentration:	3900
Nuber of Wells:	9
Depth to Groundwater:	4
MTBE Contamination Level:	14
Maximum MTBE:	78

BEACON STATION #463 (Continued) **U001595945**

Interim Remediation: Yes
Interim Remediation Date: 01-SEP-95
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: 13-MAY-98
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: 01-DEC-95
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: Pump and Treat Ground Water, Vent Soil insitu or vacuum extraction
Comments: CURRTENT MTBE DATE: 9/3/98. MAXGW=GASOLINE.

CORTESE:
Reg By: LTNKA
Reg Id: 43-0160
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0160	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported

BEACON STATION #463 (Continued) **U001595945**

Historical Minimum Depth to Groundwater: 10 (Feet)
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 8826 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported

BEACON STATION #463 (Continued) **U001595945**

Characterization	Not reported
Comments	Not reported

State UST:

Facility ID:	42188		
Tank Num:	1	Container Num:	463-2
Tank Capacity:	8000	Year Installed:	1964
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	.025 inches
Leak Detection:	Stock Inventor		
Contact Name:	JOHN DENNIS SULLIVAN	Telephone:	(209) 582-0241
Total Tanks:	3	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	42188		
Tank Num:	2	Container Num:	463-3
Tank Capacity:	8000	Year Installed:	1964
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	.025 inches
Leak Detection:	Stock Inventor		
Contact Name:	JOHN DENNIS SULLIVAN	Telephone:	(209) 582-0241
Total Tanks:	3	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

Facility ID:	42188		
Tank Num:	3	Container Num:	463-4
Tank Capacity:	8000	Year Installed:	1964
Tank Used for:	PRODUCT		
Type of Fuel:	PREMIUM	Tank Constrctn:	.025 inches
Leak Detection:	Stock Inventor		
Contact Name:	JOHN DENNIS SULLIVAN	Telephone:	(209) 582-0241
Total Tanks:	3	Region:	Not reported
Facility Type:	1	Other Type:	Not reported

AU187 **South** **> 1** **6356** **Higher**	**BEACON #463** **4073 EL CAMINO REAL** **PALO ALTO, CA**	**LUST**	**S103474292** **N/A**

LUST Region SC:

Facility ID:	06S2W18C01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Lane Davis	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O233		

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188 **SE** **> 1** **6367** **Higher**	**SHELL** **3900 MIDDLEFIELD RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **LUST**	**S101303802** **N/A**

SHELL (Continued) **S101303802**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Remove Free Product - remove floating product from water table		
Review Date:	11/25/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	10/16/1985
Pollution Char:	12/13/1985	Remed Plan:	Not reported
Remed Action:	12/13/1985	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	12/13/1985

LUST Region 2:

File Number:	43-1316	Lat/Long:	37.419554 / -122.108519
Region:	2		
Entered Date:	15-JUN-89	Last Review:	11/25/1997
Correspondence:	08-OCT-93	Report Date:	12/13/1985
Case Number:	06A2Q08N01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/13/1985
How Stopped:	Close Tank	Stopped Date:	12/13/1985
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	6100
Maximum Groundwater Impact:	Free product in the well
Current Benzene in Groundwater:	63
Maximum Benzene Concentration:	63
Nuber of Wells:	Not reported
Depth to Groundwater:	5
MTBE Contamination Level:	-14
Maximum MTBE:	150
Interim Remediation:	Yes
Interim Remediation Date:	30-JUN-88
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	16-OCT-85
Pollution Characterization:	13-DEC-85
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	13-DEC-85

SHELL (Continued) **S101303802**

Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Dispose (landfill) of soil, Remove Free Product (e.g. skimmer used or vacuumed, pumped, etc.)
Comments: FP BAILED BI-MONTHLY, VES PROPOSED

LUST Region SC:

Facility ID:	06S2W08N01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	0423		

CORTESE:

Reg By: LTNKA
Reg Id: 43-1316
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1316	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	7
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Gasoline
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	5 (Feet)
Maximum Soil Concentration of Contaminates:	6100 (parts per million)
Max Grndwater Concentration of Contaminates:	99999999 (parts per billion)
Benzene:	63
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported

SHELL (Continued) **S101303802**

Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
189 **ESE** **> 1** **6380** **Lower**	**FORD AEROSPACE CORP** **3825 FABIAN WAY** **PALO ALTO, CA 94303**	**PADS** **FINDS** **RCRIS-LQG** **RCRIS-TSD** **CORRACTS** **CERC-NFRAP** **Cal-Sites**	**1000182596** **CAD000030528**

CERCLIS-NFRAP Classification Data:

Site Incident Category: Not reported

Ownership Status: Unknown

Federal Facility: Not reported

NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment: DISCOVERY Completed: 19800901

Assessment: PRELIMINARY ASSESSMENT Completed: 19870601

CERCLIS-NFRAP Alias Name(s):

FORD AEROSPACE & COMMUNICATIONS CORP
FORD AEROSPACE
WESTERN DEVELOPMENT LABORATORIES DIV

CORRACTS Data:

Prioritization: Medium

Status: RFI Imposition, Stabilization Measures Evaluation, Stabilization Measures Implemented, Stabilization Construction Completed

RCRIS Corrective Action Summary:

Effective Date: 08/16/1989

Legal Authority: Other, specified by Legal Authority Citation

RCRIS:

Owner: FORD AEROSPACE AND COMMUNICATIONS CORP.
(313) 568-7660

Contact: ENVIRONMENTAL MANAGER
(415) 852-6022

Record Date: 09/01/1996

Classification: Large Quantity Generator

BIENNIAL REPORTS:

Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	19388.00	D002	10731.00
D003	40.00	D004	1220.00
D005	6630.00	D006	10145.00
D007	19150.00	D008	23920.00
D009	725.00	D011	13815.00
D030	40.00	D035	13249.00
F002	14399.00	F003	30469.00
F005	13249.00	P098	40.00
U223	40.00		

Used Oil Recyc: No

Violation Status: Violation information exist

FORD AEROSPACE CORP (Continued) **1000182596**

There are 13 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	TSD-Financial Responsibility Requirements	09/30/1994
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	05/06/1992
	TSD-Other Requirements	05/06/1992
	TSD-Other Requirements	05/06/1992
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	08/30/1991
	TSD-Other Requirements	08/30/1991
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/18/1990
	TSD-Other Requirements	01/18/1990
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	09/23/1988
Other Evaluation	TSD-Land Ban Requirements	09/23/1988
	Generator-Land Ban Requirements	09/23/1988
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	05/23/1988

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
National Compliance Database (NCDB)
PCB Handler Activity Data System (PADS)

CAL-SITES:

Facility ID	43360104
Status:	REFRW - DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROLBOARD (RWQCB) LEAD
Status Date:	05/03/1994
Lead:	Not reported
Region:	2 - BERKELEY
Branch:	NC - NORTH COAST
File Name:	Not reported
Status Name:	PROPERTY/SITE REFERRED TO RWQCB
Lead Agancy:	N/A
NPL:	Not reported
SIC:	36 MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Facility Type:	N/A
Facility Type Name:	Not reported
Staff Member Responsible for Site:	Not reported
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	SF - SAN FRANCISCO BAY
Access:	Controlled
Cortese:	C
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Not reported
No. of Contamintion Sources:	0.00000
Lat/Long:	0.00000 0.00000' 0.00000 / 0.00000 0.00000' 0.00000
Lat/long Method:	Not reported
State Assembly District Code:	Not reported
State Senate District:	Not reported

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
190 **WSW** **> 1** **6576** **Higher**	**ROYAL GLASS & MIRROR** **450 CAMBRIDGE AVE** **PALO ALTO, CA**	**S Bay Reg. 2** **LUST**	**S100234830** **N/A**

ROYAL GLASS & MIRROR (Continued) **S100234830**

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Unleaded Gasoline		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	01/02/1996	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	12/21/1995	Release Date:	12/05/1985

LUST Region 2:

File Number:	43-1154	Lat/Long:	37.42571 / -122.145713
Region:	2		
Entered Date:	Not reported	Last Review:	01/02/1996
Correspondence:	28-DEC-95	Report Date:	12/05/1985
Case Number:	06S3W12E03	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/05/1985
How Stopped:	Close Tank	Stopped Date:	12/05/1985
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	Not reported		
Update Status:	File archived		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.		

Primary Substance:	Unleaded Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	Not reported
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	Not reported
Enforcement Date:	Not reported
Responsible Party Search:	Not reported
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported

ROYAL GLASS & MIRROR (Continued) **S100234830**

Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: 21-DEC-95
Abatement: No Action Taken
Comments: ARCHIVED 5/17/96 CONTROL NO 120-062 SRC 0904712 062

LUST Region SC:

Facility ID:	06S3W12E03	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	12/21/95
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	S-31		

South Bay Region 2:

Facility ID:	43-1154	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 9
National Priority List: NOT REPORTED
Primary Substance Spilled: Unleaded Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported

ROYAL GLASS & MIRROR (Continued) **S100234830**

Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

191	**SHELL**	**S Bay Reg. 2**	**1000288648**
WSW	**2200 EL CAMINO REAL**	**Cortese**	**N/A**
> 1	**PALO ALTO, CA**	**LUST**	
6810			
Higher			

SHELL (Continued) **1000288648**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Remove Free Product - remove floating product from water table, Pump and Treat Ground Water - generally employed to remove dissolved contaminants		
Review Date:	11/25/1997	Confirm Leak:	Not reported
Workplan:	01/16/1990	Prelim Assess:	02/14/1983
Pollution Char:	01/22/1987	Remed Plan:	Not reported
Remed Action:	01/06/1987	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	02/14/1983

LUST Region 2:

File Number:	43-1299	Lat/Long:	37.42592 / -122.146545
Region:	2		
Entered Date:	Not reported	Last Review:	11/25/1997
Correspondence:	02-AUG-93	Report Date:	02/14/1983
Case Number:	06S3W12E01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/14/1983
How Stopped:	Close Tank	Stopped Date:	02/14/1983
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	806
Maximum Groundwater Impact:	Free product in the well
Current Benzene in Groundwater:	1100
Maximum Benzene Concentration:	1100
Nuber of Wells:	Not reported
Depth to Groundwater:	13
MTBE Contamination Level:	200000
Maximum MTBE:	280000
Interim Remediation:	Yes
Interim Remediation Date:	23-FEB-90
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	16-JAN-90
Assessment Underway:	14-FEB-83
Pollution Characterization:	22-JAN-87
Corrective Action Plan:	Not reported

SHELL (Continued) **1000288648**

Enforcement Action Date: Not reported
Remediation Underway: 06-JAN-87
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Dispose (landfill) of soil, Remove Free Product (e.g. skimmer used or vacuumed, pumped, etc.), Pump and Treat Ground Water
Comments: CURRENT MTBE DATE: 6/20/97

LUST Region SC:

Facility ID:	06S3W12E01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O423		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1299
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1299	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 7
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 13 (Feet)
Maximum Soil Concentration of Contaminates: 806 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: 1100
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported

SHELL (Continued) **1000288648**

Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

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192 **INTEVAC** **RCRIS-LQG** **1000880997**
WSW **601 CALIFORNIA AVE** **CORRACTS** **CAT080010804**
> 1 **PALO ALTO, CA 94304** **CERC-NFRAP**
6867 **HAZNET**
Higher

INTEVAC (Continued) **1000880997**

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Unknown
Federal Facility: Not reported
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	19861001
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19861201
Assessment:	HRS PACKAGE	Completed:	19870601
Assessment:	SITE INSPECTION	Completed:	19870601

CERCLIS-NFRAP Alias Name(s):
VARIAN ASSOCIATES LSE DIV (RCRA)

CORRACTS Data:
Prioritization: High
Status: RFI Imposition, RCRA Facility Investigation Approved, Corrective Measure Study Approved, Date for Remedy Selection (CM Imposed), Corrective Measures Design Approved, Corrective Measures Investigation Workplan Approved, Certification of Remedy Completion (CMI), Stabilization Measures Implemented, Stabilization Construction Completed

RCRIS Corrective Action Summary:
Effective Date: 04/15/1987
Legal Authority: Other, specified by Legal Authority Citation
Effective Date: 09/21/1994
Legal Authority: Other, specified by Legal Authority Citation

RCRIS:
Owner: INTEVAC
(408) 986-9888

Contact: NOELLE GOLLING
(408) 496-2280

Record Date: 09/01/1996

Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	44753.24	D002	23715.01
D003	21701.01	D004	32116.75
D005	12413.72	D006	17908.50
D007	8564.77	D008	10452.26
D009	1080.00	D040	990.00
F001	9431.38	F003	38283.99

Used Oil Recyc: No

Violation Status: No violations found

193
ESE
> 1
6879
Same

FORD AEROSPACE & COMMUNICATIONS
3939 FABIAN WAY
PALO ALTO, CA 94303

Cal-Sites

S100714741
N/A

FORD AEROSPACE & COMMUNICATIONS (Continued) **S100714741**

CAL-SITES:
Facility ID 43360004
Status: REFRW - DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROLBOARD (RWQCB) LEAD
Status Date: 06/15/1994
Lead: Not reported
Region: 2 - BERKELEY
Branch: NC - NORTH COAST
File Name: Not reported
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agancy: N/A
NPL: Not reported
SIC: 36 MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Facility Type: N/A
Facility Type Name: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF - SAN FRANCISCO BAY
Access: Controlled
Cortese: C
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
No. of Contamintion Sources: 0.00000
Lat/Long: 0.00000 0.00000' 0.00000 / 0.00000 0.00000' 0.00000
Lat/long Method: Not reported
State Assembly District Code: Not reported
State Senate District: Not reported

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194 **North** **> 1** **6906** **Lower**	**OLD POST OFFICE** **2197 E BAYSHORE RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese**	**S101309065** **N/A**

CORTESE:
Reg By: LTNKA
Reg Id: 43-0998
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0998	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported

OLD POST OFFICE (Continued) **S101309065**

Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 15 3 (Feet)
Maximum Soil Concentration of Contaminates: 60000 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported

OLD POST OFFICE (Continued) **S101309065**

Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

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195 **ESE** **> 1** **7028** **Higher**	**MICROFAB SYSTEMS CORP** **3960 FABIAN WY** **PALO ALTO, CA 94303**	**RCRIS-SQG** **FINDS** **UST** **S Bay Reg. 2** **Cortese** **CA SLIC** **LUST**	**1000366891** **CAD981450455**

RCRIS:

Owner: MICROFAB SYSTEMS
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 965-1750

Record Date: 03/04/1986

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Leak being confirmed		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	06/26/1989	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	10/20/1986

LUST Region 2:

File Number:	43-0888	Lat/Long:	37.424088 / -122.1033
Region:	2		
Entered Date:	26-JUN-89	Last Review:	06/26/1989
Correspondence:	20-OCT-86	Report Date:	10/20/1986
Case Number:	Not reported	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	10/20/1986

MICROFAB SYSTEMS CORP (Continued) **1000366891**

How Stopped: Close Tank Stopped Date: 10/20/1986
Leak Source: Tank Leak Cause: Structure Failure
Facility Status: Leak being confirmed
Notify: Not reported
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: 27
Maximum Groundwater Impact: 20
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: 5.4
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: Not reported
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: Not reported
Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: No Action Taken

CORTESE:
Reg By: LTNKA
Reg Id: 43-0888
Region: CORTESE

South Bay Region 2:
Facility ID: 43-0888 Staff: Not reported
Case Number: Not reported File Number: Not reported
Last Update: Not reported Case Type: Not reported
RWQCB Initials: Not reported EPA Contact: Not reported
DOHS Initials: Not reported Map Number: Not reported
Type: Other ground water or surface water is affected or threatened
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline

MICROFAB SYSTEMS CORP (Continued) **1000366891**

Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 5.4 (Feet)
Maximum Soil Concentration of Contaminates: 27 (parts per million)
Max Grndwater Concentration of Contaminates: 20 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported

MICROFAB SYSTEMS CORP (Continued) **1000366891**

Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID: 43S0927
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Type: Not reported
Lead: Regional Water Quality Board
Facility Status: CLOSED
Discovered Date: Not reported
Staff: Not reported
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported

MICROFAB SYSTEMS CORP (Continued) **1000366891**

Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	OT FROM SCVWD; solvents petroleum hydrocarbons

MICROFAB SYSTEMS CORP (Continued) **1000366891**

SLIC Region 2:

Facility ID:	43S0277
Region:	2
Facility Status:	Closed - No Further Action

Facility ID:	43S0927
Region:	2
Facility Status:	Closed - No Further Action

State UST:

Facility ID:	1829		
Tank Num:	1	Container Num:	1
Tank Capacity:	4320	Year Installed:	1982
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	6 inches
Leak Detection:	Visual		
Contact Name:	'CHUCK' ST. DENIS, FACILITIES	Telephone:	(415) 965-1750
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	PHOTOMASKING

Facility ID:	1829		
Tank Num:	2	Container Num:	2
Tank Capacity:	1008	Year Installed:	Not reported
Tank Used for:	WASTE		
Type of Fuel:	Not Reported	Tank Constrctn:	6 inches
Leak Detection:	Visual		
Contact Name:	'CHUCK' ST. DENIS, FACILITIES	Telephone:	(415) 965-1750
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	PHOTOMASKING

196	**ARCO**	**S Bay Reg. 2**	**S101303777**
WSW	**1963 EL CAMINO REAL**	**Cortese**	**N/A**
> 1	**PALO ALTO, CA**	**LUST**	
7182			
Higher			

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Remove Free Product - remove floating product from water table, Enhanced Biodegradation - use of any available technology to promote bacterial decomposition of contaminants		
Review Date:	10/15/1990	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	09/27/1988
Pollution Char:	08/30/1990	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	03/07/1989

LUST Region 2:

File Number:	43-0097	Lat/Long:	37.427957 / -122.148617
Region:	2		
Entered Date:	Not reported	Last Review:	01/11/1999

ARCO (Continued) **S101303777**

Correspondence: 03-JAN-99
Report Date: 03/07/1989
Case Number: 06S3W12E02
Staff Initial: CTH
How Discovered: Tank Closure
Discovered Date: 10/10/1988
How Stopped: Close Tank
Stopped Date: 10/10/1988
Leak Source: Tank
Leak Cause: Structure Failure
Facility Status: Pollution characterization
Notify: 0
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Diesel
Maximum Soil Concentration: 4800
Maximum Groundwater Impact: 30000
Current Benzene in Groundwater: 290
Maximum Benzene Concentration: 1900
Nuber of Wells: 16
Depth to Groundwater: 19.22
MTBE Contamination Level: -3
Maximum MTBE: 31
Interim Remediation: Yes
Interim Remediation Date: 30-MAR-89
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 1
Enforcement Date: 24-MAY-90
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: 27-SEP-88
Pollution Characterization: 30-AUG-90
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Dispose (landfill) of soil, Excavate and Treat soil. (e.g. aeration, biodegradation, etc.), Remove Free Product (e.g. skimmer used or vacuumed, pumped, etc.), Enhanced Biodegradation, soil or water, Vent Soil insitu or vacuum extraction
Comments: 0.51'FP MW2

CORTESE:
Reg By: LTNKA
Reg Id: 43-0097
Region: CORTESE

South Bay Region 2:
Facility ID: 43-0097
Staff: Not reported
Case Number: Not reported
File Number: Not reported
Last Update: Not reported
Case Type: Not reported
RWQCB Initials: Not reported
EPA Contact: Not reported
DOHS Initials: Not reported
Map Number: Not reported
Type: Other ground water or surface water is affected or threatened

ARCO (Continued) **S101303777**

Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported

Facility Description:	Not reported
Phase of Work by Responsible Party:	5
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Gasoline
Secondary Substance Spilled:	Diesel
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	26 (Feet)
Maximum Soil Concentration of Contaminates:	4800 (parts per million)
Max Grndwater Concentration of Contaminates:	99999999 (parts per billion)
Benzene:	1800
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported

ARCO (Continued) **S101303777**

Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

197
NNW
> 1
7280
Lower

1571 DANA
PALO ALTO, CA 94303

CHMIRS **S100280675**
N/A

CHMIRS:
OES Control Number: 9990679 DOT ID: Not reported
DOT Hazard Class: Not Reported
Chemical Name: MULTIPLE CHEMICALS & POWDERS
Extent of Release: Not reported
CAS Number: Not reported Quantity Released: 0
Environmental Contamination: Other Property Use: Residential
Incident Date: 23-JAN-88 Date Completed: 23-JAN-88

198
SW
> 1
7291
Higher

VARIAN ASSOCIATES INC
3120 HANSEN WY
PALO ALTO, CA 94304

PADS
FINDS
RCRIS-LQG
TRIS
CORRACTS
CERC-NFRAP
HAZNET

1000840764
CAD009120817

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported Federal Facility: Not reported
Ownership Status: Private NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY Completed: 19880401

VARIAN ASSOCIATES INC (Continued) **1000840764**

Assessment: PRELIMINARY ASSESSMENT Completed: 19890613
Assessment: PRELIMINARY ASSESSMENT Completed: 19900628

CORRACTS Data:
Prioritization: Medium
Status: RCRA Facility Assessment Completed, RFI Imposition, RFI Workplan Approved, RCRA Facility Investigation Approved, CMS Workplan Approved, Corrective Measure Study Approved, Date for Remedy Selection (CM Imposed), Corrective Measures Design Approved, Corrective Measures Investigation Workplan Approved, Certification of Remedy Completion (CMI), Stabilization Measures Implemented, Stabilization Construction Completed

RCRIS Corrective Action Summary:
Effective Date: 06/29/1989
Legal Authority: Other, specified by Legal Authority Citation
Effective Date: 08/21/1997
Legal Authority: Other, specified by Legal Authority Citation

RCRIS:
Owner: VARIAN ASSOCIATES INC.
(415) 493-4000

Contact: PETER WAN
(415) 424-5625

Record Date: 09/01/1996

Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	29986.00	D002	12461785.38
D003	10771.00	D004	216.00
D006	199.00	D007	42838.00
D008	4972.00	D009	533.00
D011	1076.00	D029	7483.00
D035	5309.00	D040	7483.00
F001	5322.00	F002	30548.00
F003	29310.00	F005	16208.00
F006	2752.00	F007	10572.00
F008	11320.00	F039	32951.00
LABP	5795.00	P004	126.00
P030	126.00		

Used Oil Recyc: No

Violation Status: Violation information exist

VARIAN ASSOCIATES INC (Continued) **1000840764**

There are 10 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	TSD-Financial Responsibility Requirements	06/30/1994
	TSD-Other Requirements	06/30/1994
	Generator-All Requirements	06/30/1994
	TSD-Other Requirements	06/30/1994
	Generator-All Requirements	06/30/1994
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	04/09/1991
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	04/03/1990
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	01/30/1990
Other Evaluation	TSD-Other Requirements	04/09/1991

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
PCB Handler Activity Data System (PADS)

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199 **West** **> 1** **7492** **Higher**	**FILL EM FAST** **1795 EL CAMINO REAL** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **HAZNET** **LUST**	**S101303776** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)		
Review Date:	03/29/1993	Confirm Leak:	Not reported
Workplan:	12/13/1990	Prelim Assess:	Not reported
Pollution Char:	08/07/1991	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	10/27/1986

LUST Region 2:

File Number:	43-0578	Lat/Long:	37.429318 / -122.150096
Region:	2		
Entered Date:	26-JUN-89	Last Review:	03/29/1993
Correspondence:	04-OCT-93	Report Date:	10/27/1986
Case Number:	06S3W11A02	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	11/08/1986
How Stopped:	Close Tank	Stopped Date:	11/08/1986
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		
Primary Substance:	Gasoline		
Secondary Substance:	Diesel		

FILL EM FAST (Continued) **S101303776**

Maximum Soil Concentration: 88
Maximum Groundwater Impact: Free product in the well
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: 105
Maximum MTBE: 105
Interim Remediation: Yes
Interim Remediation Date: 27-OCT-86
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: 13-DEC-90
Assessment Underway: Not reported
Pollution Characterization: 07-AUG-91
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Treat soil. (e.g. aeration, biodegradation, etc.)
Comments: CURRENT MTBE DATE: 9/22/97

CORTESE:
Reg By: LTNKA
Reg Id: 43-0578
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0578	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Diesel
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported

FILL EM FAST (Continued) **S101303776**

Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	88 (parts per million)
Max Grndwater Concentration of Contaminates:	99999999 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported

FILL EM FAST (Continued) **S101303776**

Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

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200 **ESE** **> 1** **7516** **Higher**	**SHELL OIL CO** **811 CHARLESTON** **PALO ALTO, CA 94303**	**RCRIS-SQG** **FINDS** **S Bay Reg. 2** **Cortese** **HAZNET** **LUST**	**1000288573** **CAD981400898**

RCRIS:

Contact: SONDRA BIENVENU
(713) 241-2258

Record Date: 04/08/1998

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

State LUST:

Facility Type	INACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Signed off, remedial action completed or deemed unnecessary		
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Remove Free Product - remove floating product from water table, Pending		
Review Date:	11/07/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	10/30/1970
Pollution Char:	10/30/1970	Remed Plan:	Not reported
Remed Action:	04/01/1989	Monitoring:	Not reported
Close Date:	10/10/1997	Release Date:	10/09/1970

LUST Region 2:

File Number:	43-1332	Lat/Long:	37.4221 / -122.10368
Region:	2		
Entered Date:	21-APR-89	Last Review:	11/07/1997
Correspondence:	04-NOV-97	Report Date:	10/09/1970
Case Number:	06S2W08K07	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	10/09/1970
How Stopped:	Close Tank	Stopped Date:	10/09/1970
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Signed off, remedial action completed or deemed unnecessary		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		

SHELL OIL CO (Continued) **1000288573**

Case Type: Other ground water or surface water is affected or threatened

Primary Substance:	Gasoline
Secondary Substance:	Misc. Motor Vehicle Fuels
Maximum Soil Concentration:	14000
Maximum Groundwater Impact:	4100
Current Benzene in Groundwater:	480
Maximum Benzene Concentration:	4900
Nuber of Wells:	18
Depth to Groundwater:	2.1
MTBE Contamination Level:	-1
Maximum MTBE:	25
Interim Remediation:	Yes
Interim Remediation Date:	31-AUG-88
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	30-OCT-70
Pollution Characterization:	30-OCT-70
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	01-APR-89
Monitoring Begun:	Not reported
Case Closed:	10-OCT-97

Abatement: Excavate and Treat soil. (e.g. aeration, biodegradation, etc.), Remove Free Product (e.g. skimmer used or vacuumed, pumped, etc.), Pending

Comments: PCB GW UPTO 340PPB 8/88; CURRENT MTBE DATE: 5/5/97 3RD QTR (FINAL) MONITORING REPORT - 11/04/97 MOST RECENT CORR.

LUST Region SC:

Facility ID:	06S2W08K07	Region:	Santa Clara
Facility Status:	Sign Off by SCVWD	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	10/10/97
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O423		

HAZNET:

Year:	Not reported		
Gepaid:	CAL000094048	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	41
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	343		
Disposal Method:	R01		

CORTESE:

Reg By:	LTNKA
Reg Id:	43-1332
Region:	CORTESE

SHELL OIL CO (Continued) **1000288573**

South Bay Region 2:

Facility ID: 43-1332
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Staff: Not reported
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported
Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 7
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Misc. Motor Vehicle Fuels
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 6 (Feet)
Maximum Soil Concentration of Contaminates: 14000 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported

SHELL OIL CO (Continued) **1000288573**

Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

201
ESE
> 1
7642
Lower

VICKERS CONCRETE
4083 TRANSPORT ST
PALO ALTO, CA

S Bay Reg. 2 **S100234906**
Cortese **N/A**
LUST

State LUST:
Facility Type ACTIVE
Cross Street: Not reported
Reg Board: San Francisco Bay Region
Qty Leaked: Not reported
Chemical: Diesel
Lead Agency: Regional Board
Case Type: Other ground water affected
Status: Leak being confirmed
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site, Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Review Date: 06/30/1998
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: Not reported
Release Date: 10/04/1985

CORTESE:
Reg By: LTNKA
Reg Id: 43-1602
Region: CORTESE

VICKERS CONCRETE (Continued) **S100234906**

South Bay Region 2:

Facility ID:	43-1602	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Diesel
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 460 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported

VICKERS CONCRETE (Continued) **S100234906**

Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

AV202	**WHEATLEY ASSOCIATES WHSE**	**UST**	**U001595904**
ESE	**890 SAN ANTONIO RD.**	**S Bay Reg. 2**	**N/A**
> 1	**PALO ALTO, CA 94303**	**Cortese**	
7733		**LUST**	
Lower			

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	11/25/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	11/25/1997	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	07/19/1985

LUST Region 2:

File Number:	43-1639	Lat/Long:	37.407154 / -122.108456
Region:	2		
Entered Date:	06-JUL-89	Last Review:	11/25/1997

WHEATLEY ASSOCIATES WHSE (Continued) **U001595904**

Correspondence:	01-APR-93	Report Date:	07/19/1985
Case Number:	06S2W08K04	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	01/01/1901
How Stopped:	Close Tank	Stopped Date:	01/01/1901
Leak Source:	Tank	Leak Cause:	Structure Failure

Facility Status: Pollution characterization
Notify: 0
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: Not reported
Maximum Groundwater Impact: Free product or sheen in the tank pit
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: 8
MTBE Contamination Level: 38
Maximum MTBE: 38
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Not reported
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: 25-NOV-97
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: No Action Taken
Comments: CURRENT MTBE DATE: 12/31/96

LUST Region SC:

Facility ID:	06S2W08K04	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Greg Gibson	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O341		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1639
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1639	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported

WHEATLEY ASSOCIATES WHSE (Continued) U001595904

RWQCB Initials: Not reported EPA Contact: Not reported
DOHS Initials: Not reported Map Number: Not reported
Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 8 (Feet)
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 88888888 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported

WHEATLEY ASSOCIATES WHSE (Continued)   **U001595904**

Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

State UST:

Facility ID:	829		
Tank Num:	1	Container Num:	1
Tank Capacity:	2000	Year Installed:	1974
Tank Used for:	PRODUCT		
Type of Fuel:	PREMIUM	Tank Constrctn:	1/4" inches
Leak Detection:	Stock Inventor		
Contact Name:	LEWIS MILLER	Telephone:	(415) 494-7902
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	CONST. CO.

Facility ID:	829		
Tank Num:	2	Container Num:	UL#H692293
Tank Capacity:	2000	Year Installed:	1980
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	1/4" inches
Leak Detection:	Stock Inventor		
Contact Name:	LEWIS MILLER	Telephone:	(415) 494-7902
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	CONST. CO.

AV203
ESE
> 1
7744
Lower

4019 TRANSPORT
PALO ALTO, CA 94303

CHMIRS   **S100276523**
N/A

(Continued) **S100276523**

CHMIRS:

OES Control Number:	9099751	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	COPPER SULFATE		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	0
Environmental Contamination:	Ground	Property Use:	Industrial, Utility
Incident Date:	23-DEC-90	Date Completed:	23-DEC-90

AW204
SW
> 1
7793
Higher

925 PAGEMILL ROAD PALO ALTO
PALO ALTO, CA

CHMIRS **S100220106**
N/A

CHMIRS:

OES Control Number:	9011685	DOT ID:	1830
DOT Hazard Class:	Corrosives		
Chemical Name:	ACID, SULFURIC		
Extent of Release:	Not reported		
CAS Number:	7664939	Quantity Released:	10
Environmental Contamination:	None Reported	Property Use:	Industrial, Utility
Incident Date:	04-JUL-90	Date Completed:	04-JUL-90

AW205
SW
> 1
7793
Higher

925 PAGE MILL ROAD
PALO ALTO, CA 94303

CHMIRS **S100276361**
N/A

CHMIRS:

OES Control Number:	9099327	DOT ID:	1830
DOT Hazard Class:	Corrosives		
Chemical Name:	ACID, SULFURIC		
Extent of Release:	Not reported		
CAS Number:	8014-95-7	Quantity Released:	10
Environmental Contamination:	Air	Property Use:	Manufacturing
Incident Date:	10-JUL-90	Date Completed:	10-JUL-90

AW206
SW
> 1
7793
Higher

EASTMAN KODAK COMPANY
925 PAGE MILL RD
PALO ALTO, CA

S Bay Reg. 2
Cortese
CA SLIC
LUST

S101542283
N/A

EASTMAN KODAK COMPANY (Continued) **S101542283**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Solvents		
Lead Agency:	Regional Board		
Case Type:	Undefined		
Status:	Leak being confirmed		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	08/22/1995	Confirm Leak:	04/20/1995
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	04/17/1995

LUST Region SC:

Facility ID:	06S3W12P02	Region:	Santa Clara
Facility Status:	RWQCB Oversight	Facility Region:	SANTA CLARA
Case Worker:	RWQCB	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	8/22/95
Case Rank:	U122		

CORTESE:

Reg By:	LTNKA
Reg Id:	43-1969
Region:	CORTESE

South Bay Region 2:

Facility ID:	43-1969	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	There is insufficient data or information to determine whether groundwater and/or soil has been impacted		
Lead:	Regional Board		
Facility Status:	Not reported		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	1
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Solvents
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported

EASTMAN KODAK COMPANY (Continued) **S101542283**

Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported

EASTMAN KODAK COMPANY (Continued) **S101542283**

Characterization	Not reported
Comments	Not reported

Facility ID:	43S0197	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8371
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Not reported		
Facility Status:	Not reported		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	Yes
Contaminant Concentration Type (1):	Groundwater
Key Contaminant Concentration (1):	1,1,1-TCA
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	191 (parts per billion)
Contaminant Concentration Type (2):	Groundwater
Key Contaminant Concentration (2):	1,1,DCA
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	170 (parts per billion)
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	0
Size Depth (FT):	0
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	YES
Total of Extraction Flow Rate:	0.0gpm
Estimated % of Contaminants Contained:	NOT APP
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported

EASTMAN KODAK COMPANY (Continued) **S101542283**

Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	ND
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	ND
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

Facility ID:	43S0197	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8371
Last Update:	05/22/95	Case Type:	TK
RWQCB Initials:	HTK	EPA Contact:	NONE
DOHS Initials:	Not reported	Map Number:	U14-06S03W12
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	ACTIVE		
Discovered Date:	Not reported		

Facility Description:	PHOTOGRAPHIC FILM & PAPER PROCESSING PLANT
Phase of Work by Responsible Party:	NOT REPORTED
National Priority List:	NOT REPORTED
Primary Substance Spilled:	NOT REPORTED
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Groundwater
Key Contaminant Concentration (1):	1,1,1-TCA
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Groundwater

EASTMAN KODAK COMPANY (Continued) **S101542283**

Key Contaminant Concentration (2):	1,1,DCA
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	.
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	0
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	YES
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	UNKNOWN
Contaminant Concentration as of:	AS_OF:_11/20/89
Contaminant Concentration (1):	YES
Well or Boring Number (1):	KPM-1
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	191 (parts per billion)
Contaminant Concentration (2):	YES
Well or Boring Number (2):	KPM-1
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	170 (parts per billion)
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	0
Number of Private Wells:	0
Closure Name:	NONE
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	NOT DETERMINED
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	NOT DETER
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	NONE
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported

EASTMAN KODAK COMPANY (Continued) **S101542283**

Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions:
1) SOIL REMOVAL
Remediation: Not reported
Characterization CONTINUING
Comments UNDERGROUND SOLVENT TANK REMOVED 1/93 - CURRENT INVESTIGATION CONTINUING SOIL REMOVED 12/93

EASTMAN KODAK COMPANY (Continued) **S101542283**

SLIC Region 2:
Facility ID: 43S0197
Region: 2
Facility Status: Active

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
207 **ESE** **> 1** **7820** **Higher**	**JONES & BRIDGES, INC.** **812 SAN ANTONIO ROAD** **PALO ALTO, CA 92378**	**Notify 65**	**U000053999** **N/A**

NOTIFY 65:
Date Reported: Not reported Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 92378

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
AX208 **ESE** **> 1** **7822** **Higher**	**ADVALLOY INC** **844 E CHARLESTON** **PALO ALTO, CA 94303**	**RCRIS-SQG** **FINDS** **CERC-NFRAP** **S Bay Reg. 2** **Cortese** **HAZNET** **CA SLIC** **LUST**	**1000149189** **CAD009463779**

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported Federal Facility: Not reported
Ownership Status: Private NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY Completed: 19881001
Assessment: PRELIMINARY ASSESSMENT Completed: 19910215

RCRIS:
Owner: STOCKHOLDERS
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 494-7171

Record Date: 09/01/1996

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

ADVALLOY INC (Continued) **1000149189**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Misc. Motor Vehicle Fuels		
Lead Agency:	Regional Board		
Case Type:	Undefined		
Status:	No leak action taken by responsible party after initial report of leak		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	10/31/1993	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	10/31/1993

CORTESE:

Reg By:	LTNKA
Reg Id:	43-1908
Region:	CORTESE

South Bay Region 2:

Facility ID:	43-1908	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	There is insufficient data or information to determine whether groundwater and/or soil has been impacted		
Lead:	Regional Board		
Facility Status:	Not reported		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	0
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Misc. Motor Vehicle Fuels
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported

ADVALLOY INC (Continued) **1000149189**

Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

Facility ID:	43S0246	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8344
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported

ADVALLOY INC (Continued) **1000149189**

DOHS Initials: Not reported Map Number: Not reported
Type: Not reported
Lead: Not reported
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Groundwater
Key Contaminant Concentration (1): TCE
Initial Maximum Concentration (1): 7600 (parts per billion)
Current Maximum Concentration (1): 120 (parts per billion)
Contaminant Concentration Type (2): Groundwater
Key Contaminant Concentration (2): TRANS-1,2 DCE
Initial Maximum Concentration (2): 41 (parts per billion)
Current Maximum Concentration (2): 1 (part per billion)
Contaminant Concentration Type (3): Groundwater
Key Contaminant Concentration (3): TOLUENE
Initial Maximum Concentration (3): 33 (parts per billion)
Plume in Length (FT): >1000
Size Depth (FT): 0
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): 1 (part per billion)
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: NOT DETERMINED
Total of Extraction Flow Rate: 0.0gpm
Estimated % of Contaminants Contained: NOT APP
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: ND
Onsite Water Action Needed Start Date: Not reported

ADVALLOY INC (Continued) **1000149189**

Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: ND
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID:	43S0246	Staff:	Not reported
Case Number:	Not reported	File Number:	2189.8344
Last Update:	01/30/94	Case Type:	NT
RWQCB Initials:	RAD	EPA Contact:	NONE
DOHS Initials:	Not reported	Map Number:	U15-06S02W08
Type:	Not reported		
Lead:	Regional Water Quality Board		
Facility Status:	ACTIVE		
Discovered Date:	06/13/88		

Facility Description: PLATING FOR THE ELECTRONICS INDUSTRY
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Groundwater
Key Contaminant Concentration (1): TCE
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Groundwater
Key Contaminant Concentration (2): TRANS-1,2 DCE
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Groundwater
Key Contaminant Concentration (3): TOLUENE
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): >1000

ADVALLOY INC (Continued) **1000149189**

Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	NOT DETERMINED
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	ACID NEUTRALIZATION SUMP & SURFACE SPILLS
Contaminant Concentration as of:	AS_OF:_06/13/88
Contaminant Concentration (1):	YES
Well or Boring Number (1):	MW-2
Initial Level Concentration (1):	7600 (parts per billion)
Current Level Concentration (1):	120 (parts per billion)
Contaminant Concentration (2):	YES
Well or Boring Number (2):	MW-2
Initial Level Concentration (2):	41 (parts per billion)
Current Level Concentration (2):	1 (part per billion)
Contaminant Concentration (3):	YES
Well or Boring Number (3):	MW-2
Initial Level Concentration (3):	33 (parts per billion)
Current Level Concentration (3):	1 (part per billion)
Number of Municipal Wells:	0
Number of Private Wells:	0
Closure Name:	NONE
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	NOT DETERMINED
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	NOT DETER
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	RWQCB: SITE CLEANUP RQMTS. # 90-016
Enforcement Action Date (1):	04/11/90
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported

ADVALLOY INC (Continued) **1000149189**

Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization SITE NOT COMPLETELY CHARACTERIZED; CURRENTLY NO VIABLE R.P.
Comments ADVALLOY IS NO LONGER IN BUSINESS. REFERRED TO AG FOR NON-COMPLIANCE 9/90 NO DETERMINATION AS TO WHEN CHARACTERIZATION WILL CONTINUE.

SLIC Region 2:
Facility ID: 43S0246
Region: 2
Facility Status: Active

AX209
ESE
> 1
7822
Higher

ADVALLOY CORPORATION
844 E CHARLESTON RD
PALO ALTO, CA 94303

Cal-Sites **S101482218**
N/A

CAL-SITES:
Facility ID 41350025
Status: REFRW - DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROLBOARD (RWQCB) LEAD
Status Date: 07/27/1994
Lead: Not reported
Region: 2 - BERKELEY
Branch: NC - NORTH COAST
File Name: Not reported
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agancy: N/A
NPL: Not reported
SIC: 35 MANU - INDUSTRIAL MACHINERY & EQUIPMENT
Facility Type: N/A
Facility Type Name: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: Not reported
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
No. of Contamintion Sources: 0.00000
Lat/Long: 0.00000 0.00000' 0.00000 / 0.00000 0.00000' 0.00000
Lat/long Method: Not reported
State Assembly District Code: Not reported
State Senate District: Not reported

210
ESE
> 1
7865
Lower

GARCIA DRILLING
2642 BAYSHORE FWY
MOUNTAIN VIEW, CA

S Bay Reg. 2 **S100234728**
Cortese **N/A**
LUST

GARCIA DRILLING (Continued) **S100234728**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Review Date:	08/24/1989	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	08/24/1989	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	05/20/1985

LUST Region 2:

File Number:	43-0630	Lat/Long:	37.428201 / -122.098509
Region:	2		
Entered Date:	Not reported	Last Review:	08/24/1989
Correspondence:	01-APR-93	Report Date:	05/20/1985
Case Number:	06S2W08H01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	06/13/1985
How Stopped:	Close Tank	Stopped Date:	06/13/1985
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	Not reported
Maximum Groundwater Impact:	2300
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	7
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	Yes
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Not reported
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported
Pollution Characterization:	24-AUG-89
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported

GARCIA DRILLING (Continued) S100234728

Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Dispose (landfill) of soil

CORTESE:
Reg By: LTNKA
Reg Id: 43-0630
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0630	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 7 (Feet)
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 2300 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported

GARCIA DRILLING (Continued) **S100234728**

Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

AX211 **CHMIRS** **S100219049**
ESE **961 E. CHARLESTON AVE** **N/A**
> 1 **PALO ALTO, CA 94306**
7902
Same

CHMIRS:
OES Control Number: 8910930 DOT ID: Not reported
DOT Hazard Class: Flammable liquid
Chemical Name: DIESEL FUEL
Extent of Release: Not reported
CAS Number: Not reported Quantity Released: 20
Environmental Contamination: Ground Property Use: County/City Road
Incident Date: 01-DEC-89 Date Completed: 01-DEC-89

AX212 **ESE** **> 1** **7912** **Same**	**ARCO** **840 SAN ANTONIO RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **HAZNET** **LUST**	**S100855218** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Pump and Treat Ground Water - generally employed to remove dissolved contaminants		
Review Date:	11/21/1997	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	02/19/1986
Pollution Char:	12/30/1988	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	08/17/1987

LUST Region 2:

File Number:	43-0118	Lat/Long:	Not reported
Region:	2		
Entered Date:	Not reported	Last Review:	01/11/1999
Correspondence:	17-DEC-98	Report Date:	08/17/1987
Case Number:	06S2W08K05	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	08/19/1987
How Stopped:	Close Tank	Stopped Date:	08/19/1987
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Waste Oil
Maximum Soil Concentration:	6000
Maximum Groundwater Impact:	17000
Current Benzene in Groundwater:	100
Maximum Benzene Concentration:	1200
Nuber of Wells:	6
Depth to Groundwater:	5.47
MTBE Contamination Level:	460
Maximum MTBE:	920
Interim Remediation:	Yes
Interim Remediation Date:	30-DEC-88
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	19-FEB-86

ARCO (Continued) **S100855218**

Pollution Characterization: 30-DEC-88
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: Excavate and Dispose (landfill) of soil, Pump and Treat Ground Water
Comments: 25000PPB-TPH CURRENT MTBE CONCENTRATION UPDATED 11/21/97

LUST Region SC:

Facility ID:	06S2W08K05	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Cris Tulloch	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	0333		

HAZNET:

Year:	Not reported		
Gepaid:	CAL000018999	Tepaid:	CAD004771168
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	83
Tsd Name:	H & H SHIP SERVICE CO		
Tsd Address:	220 CHINA BASIN ST SAN FRANCISCO		
Tsd County	San Francisco		
Mailing Address:	Not reported		
Category:	134		
Disposal Method:	R01		

Year:	93		
Gepaid:	CAL000018999	Tepaid:	CAD004771168
Contact:	SUSAN PARSONS PRESIDENT	Telephone:	(415) 543-4835
Gen County:	Santa Clara	Tons:	0.83
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	San Francisco		
Mailing Address:	220 CHINA BASIN ST SAN FRANCISCO, CA 94107		
Category:	134		
Disposal Method:	R01		

CORTESE:

Reg By: LTNKA
Reg Id: 43-0118
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0118	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels

ARCO (Continued) **S100855218**

Secondary Substance Spilled: Waste Oil
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 7 (Feet)
Maximum Soil Concentration of Contaminates: 6000 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported

ARCO (Continued) **S100855218**

Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

213
South
> 1
7970
Higher

743 CEREZA
PALO ALTO, CA 94306

CHMIRS **S100280681**
N/A

CHMIRS:

OES Control Number:	9990691	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	LINDANE		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	.125
Environmental Contamination:	Other	Property Use:	Residential
Incident Date:	28-NOV-88	Date Completed:	28-NOV-88

214
East
> 1
8022
Lower

PACIFIC BELL
2750 MARINE WAY
MOUNTAIN VIEW, CA 94040

RCRIS-SQG **1000251279**
FINDS **CAT080021181**
S Bay Reg. 2
Cortese
LUST

RCRIS:

Owner:	THE PACIFIC TELEPHONE AND TELEGRAPH CO (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (408) 491-6029
Record Date:	09/01/1996
Classification:	Small Quantity Generator

PACIFIC BELL (Continued) **1000251279**

Used Oil Recyc: No

Violation Status: No violations found

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	07/20/1988	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	07/20/1988	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	01/27/1988

LUST Region 2:

File Number:	43-1015	Lat/Long:	37.431 / -122.0969
Region:	2		
Entered Date:	Not reported	Last Review:	07/20/1988
Correspondence:	26-APR-88	Report Date:	01/27/1988
Case Number:	06S2W08A01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	01/27/1988
How Stopped:	Close Tank	Stopped Date:	01/27/1988
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Not reported
Maximum Soil Concentration:	6
Maximum Groundwater Impact:	Free product in the well
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	10
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	Not reported
Assessment Underway:	Not reported
Pollution Characterization:	20-JUL-88
Corrective Action Plan:	Not reported

PACIFIC BELL (Continued) **1000251279**

Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: No Action Taken

LUST Region SC:

Facility ID:	06S2W08A01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Linda Dorn	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O432		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1015
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1015	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 10 (Feet)
Maximum Soil Concentration of Contaminates: 6 (parts per million)
Max Grndwater Concentration of Contaminates: 99999999 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported

PACIFIC BELL (Continued) **1000251279**

Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

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215 **NNW** **> 1** **8047** **Lower**	**700 BLOCK NEWELL ROAD / KINGS LANE** **PALO ALTO, CA 94303**	**CHMIRS**	**S100275842** **N/A**

(Continued) **S100275842**

CHMIRS:
OES Control Number: 9011633 DOT ID: 1910
DOT Hazard Class: Corrosives
Chemical Name: LIME POWDER CALCIUM OXIDE
Extent of Release: Not reported
CAS Number: Not reported Quantity Released: 10
Environmental Contamination: Ground Property Use: County/City Road
Incident Date: 01-JUL-90 Date Completed: 01-JUL-90

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216 **South** **> 1** **8131** **Higher**	**HYATT RICKEYS** **4201-4219 EL CAMINO REAL** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **HAZNET** **CA SLIC** **LUST**	**S101693042** **N/A**

State LUST:
Facility Type ACTIVE Cross Street: Not reported
Reg Board: San Francisco Bay Region Qty Leaked: Not reported
Chemical: Gasoline
Lead Agency: Local Agency
Case Type: Other ground water affected
Status: Preliminary site assessment underway
Abate Method: No Action Taken - no action has as yet been taken at the site
Review Date: 03/10/1993 Confirm Leak: Not reported
Workplan: Not reported Prelim Assess: 03/18/1992
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported Monitoring: Not reported
Close Date: Not reported Release Date: 03/30/1992

LUST Region 2:
File Number: 43-1009 Lat/Long: 37.40984 / -122.121605
Region: 2
Entered Date: 11-MAR-93 Last Review: 03/10/1993
Correspondence: 30-MAR-92 Report Date: 03/30/1992
Case Number: 06S2W18L02 Staff Initial: CTH
How Discovered: Tank Closure Discovered Date: 03/30/1992
How Stopped: Close Tank Stopped Date: 03/30/1992
Leak Source: Tank Leak Cause: Structure Failure
Facility Status: Preliminary site assessment underway
Notify: 0
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: Not reported
Maximum Groundwater Impact: A sheen in a monitoring well
Current Benzene in Groundwater: 9100
Maximum Benzene Concentration: 9100
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: 220
Maximum MTBE: 220
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency

HYATT RICKEYS (Continued) **S101693042**

Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
Leak Confirmed: Not reported
Workplan Submitted: Not reported
Assessment Underway: 18-MAR-92
Pollution Characterization: Not reported
Corrective Action Plan: Not reported
Enforcement Action Date: Not reported
Remediation Underway: Not reported
Monitoring Begun: Not reported
Case Closed: Not reported
Abatement: No Action Taken
Comments: HISTORIC TANKS ONSITE,O/T TO SCVWD 2/97-RP CLAIMS OFFSITE SOURCE

LUST Region SC:

Facility ID:	06S2W18L02	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Donna Mena	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	3/6/97
Case Rank:	O232		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1009
Region: CORTESE

South Bay Region 2:

Facility ID:	43S0514	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Not reported		
Lead:	Not reported		
Facility Status:	INACTIVE		
Discovered Date:	Not reported		

Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported

HYATT RICKEYS (Continued) **S101693042**

Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	Not reported
Max Grndwater Concentration of Contaminates:	Not reported
Benzene:	Not reported
Maximum Benzene:	Not reported
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported

HYATT RICKEYS (Continued) **S101693042**

Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID: 43S0473
Case Number: Not reported
Last Update: Not reported
RWQCB Initials: Not reported
DOHS Initials: Not reported
Type: Not reported
Lead: Not reported
Facility Status: ACTIVE
Discovered Date: Not reported

Staff: JRW
File Number: Not reported
Case Type: Not reported
EPA Contact: Not reported
Map Number: Not reported

Facility Description: Not reported
Phase of Work by Responsible Party: NOT REPORTED
National Priority List: NOT REPORTED
Primary Substance Spilled: NOT REPORTED
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): 0
Size Depth (FT): 0
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: Not reported
Max Grndwater Concentration of Contaminates: Not reported
Benzene: Not reported
Maximum Benzene: Not reported
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported

HYATT RICKEYS (Continued) **S101693042**

Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

Facility ID:	43-1009	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Regional Board
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 3
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported

HYATT RICKEYS (Continued) **S101693042**

Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	77777777 (parts per billion)
Benzene:	9100
Maximum Benzene:	9100
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported

HYATT RICKEYS (Continued) **S101693042**

Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

HYATT RICKEYS (Continued) **S101693042**

SLIC Region 2:
Facility ID: 43S0514
Region: 2
Facility Status: Inactive

AY217 **NNE** **> 1** **8178** **Lower**	**GO POWER** **1890 EMBARCADERO RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese**	**S101309081** **N/A**

CORTESE:
Reg By: LTNKA
Reg Id: 43-0649
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0649	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 0
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 0 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported

GO POWER (Continued) **S101309081**

Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

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218 **ESE** **> 1** **8192** **Lower**	**855 COMMERCIAL ST.** **PALO ALTO, CA 94303**	**CHMIRS**	**S100280678** **N/A**

(Continued) **S100280678**

CHMIRS:

OES Control Number:	9990685	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	COPPER SULFATE		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	Not reported
Environmental Contamination:	Ground	Property Use:	Manufacturing
Incident Date:	09-NOV-88	Date Completed:	09-NOV-88

AY219
NNE
> 1
8197
Lower

2425 EMBARCADERO WAY
PALO ALTO, CA 94303

CHMIRS **S100279440**
N/A

CHMIRS:

OES Control Number:	8910007	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	TRITIUM		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	Not reported
Environmental Contamination:	Other	Property Use:	Storage
Incident Date:	04-JAN-89	Date Completed:	04-JAN-89

AZ220
SE
> 1
8285
Higher

ULTRAMAR BEACON
780 SAN ANTONIO RD
PALO ALTO, CA

S Bay Reg. 2
Cortese
LUST

S102439562
N/A

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)		
Review Date:	02/24/1993	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	09/10/1985
Pollution Char:	02/27/1991	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	06/24/1985

LUST Region 2:

File Number:	43-1498	Lat/Long:	37.407154 / -122.108456
Region:	2		
Entered Date:	12-JAN-91	Last Review:	02/24/1993
Correspondence:	08-OCT-93	Report Date:	06/24/1985
Case Number:	06S2W08Q01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	06/24/1985
How Stopped:	Close Tank	Stopped Date:	06/24/1985
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	Not reported		

ULTRAMAR BEACON (Continued) **S102439562**

Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Gasoline
Secondary Substance: Misc. Motor Vehicle Fuels
Maximum Soil Concentration: 7000
Maximum Groundwater Impact: 99000
Current Benzene in Groundwater: 3300
Maximum Benzene Concentration: 3300
Nuber of Wells: Not reported
Depth to Groundwater: 7
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: Yes
Interim Remediation Date: 05-JUN-86
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: 10-SEP-85
  Pollution Characterization: 27-FEB-91
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: Excavate and Treat soil. (e.g. aeration, biodegradation, etc.)
Comments: NFAP 7/88

CORTESE:
Reg By: LTNKA
Reg Id: 43-1498
Region: CORTESE

South Bay Region 2:
Facility ID: 43-1498 Staff: Not reported
Case Number: Not reported File Number: Not reported
Last Update: Not reported Case Type: Not reported
RWQCB Initials: Not reported EPA Contact: Not reported
DOHS Initials: Not reported Map Number: Not reported
Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Misc. Motor Vehicle Fuels
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported

ULTRAMAR BEACON (Continued)

S102439562

Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	7 (Feet)
Maximum Soil Concentration of Contaminates:	7000 (parts per million)
Max Grndwater Concentration of Contaminates:	99000 (parts per billion)
Benzene:	3300
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported

ULTRAMAR BEACON (Continued) **S102439562**

Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

AZ221
SE
> 1
8302
Higher

777 SAN ANTONIO RD.
PALO ALTO, CA 94303

CHMIRS **S100222107**
HAZNET **N/A**

CHMIRS:

OES Control Number:	9990684	DOT ID:	1789
DOT Hazard Class:	Corrosives		
Chemical Name:	ACID, MURIATIC		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	1
Environmental Contamination:	Ground	Property Use:	Private Road
Incident Date:	25-OCT-88	Date Completed:	25-OCT-88

222
NNE
> 1
8447
Lower

PALO ALTO AIRPORT
1901 EMBARCADERO RD
PALO ALTO, CA

S Bay Reg. 2 **S101303784**
Cortese **N/A**
LUST

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Jet Fuel		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Remediation plan developed		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	05/15/1992	Confirm Leak:	Not reported
Workplan:	09/08/1989	Prelim Assess:	09/08/1988
Pollution Char:	07/10/1990	Remed Plan:	07/12/1991
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	02/08/1989

LUST Region 2:

File Number:	43-1027	Lat/Long:	37.45363 / -122.112376
Region:	2		
Entered Date:	26-APR-89	Last Review:	05/15/1992

PALO ALTO AIRPORT (Continued) **S101303784**

Correspondence:	21-SEP-93	Report Date:	02/08/1989
Case Number:	055S2W32E0	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	01/11/1989
How Stopped:	Close Tank	Stopped Date:	01/11/1989
Leak Source:	Tank	Leak Cause:	Structure Failure

Facility Status: Remediation plan developed
Notify: Not reported
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Other ground water or surface water is affected or threatened
Primary Substance: Jet Fuel
Secondary Substance: Diesel
Maximum Soil Concentration: 5700
Maximum Groundwater Impact: 410
Current Benzene in Groundwater: 7
Maximum Benzene Concentration: 7
Nuber of Wells: Not reported
Depth to Groundwater: 3
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: 08-SEP-89
  Assessment Underway: 08-SEP-88
  Pollution Characterization: 10-JUL-90
  Corrective Action Plan: 12-JUL-91
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: No Action Taken

LUST Region SC:

Facility ID:	05S2W32E01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Adele Shepherd	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O412		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1027
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1027	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported

PALO ALTO AIRPORT (Continued) **S101303784**

DOHS Initials: Not reported Map Number: Not reported
Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Waste Oil
Secondary Substance Spilled: Diesel
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 3 (Feet)
Maximum Soil Concentration of Contaminates: 5700 (parts per million)
Max Grndwater Concentration of Contaminates: 410 (parts per billion)
Benzene: 7
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported

PALO ALTO AIRPORT (Continued) **S101303784**

Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

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223 **SE** **> 1** **8488** **Higher**	**WEST BAY CYCLES** **750 SAN ANTONIO RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **LUST**	**S101303815** **N/A**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Soil only		
Status:	Preliminary site assessment workplan submitted		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	07/05/1989	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	Not reported

LUST Region 2:

File Number:	43-1630	Lat/Long:	37.407154 / -122.108456
Region:	2		
Entered Date:	10-JUL-89	Last Review:	07/05/1989
Correspondence:	Not reported	Report Date:	Not reported
Case Number:	06S2W08Q03	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	01/01/1901
How Stopped:	Close Tank	Stopped Date:	01/01/1901
Leak Source:	Tank	Leak Cause:	Structure Failure

WEST BAY CYCLES (Continued) **S101303815**

Facility Status: Preliminary site assessment workplan submitted
Notify: Not reported
Update Status: Not reported
Review Status: Not reported
Priority: Not reported
Local Agency: Santa Clara County
Case Type: Soil contamination has occured at such low levels as to not pose a threat to water quality. One of the following sets of conditions must be met: 1.) Initial soil contamination is less then 100 parts per million below the tank 2.) Low permeable soil (silts & clay) 3.) No shallow ground water, >50' Or 4.) Monitoring wells have been installed in appropriate locations and water analysis shows non-detect.
Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: 400
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Not reported
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
  Leak Confirmed: Not reported
  Workplan Submitted: Not reported
  Assessment Underway: Not reported
  Pollution Characterization: Not reported
  Corrective Action Plan: Not reported
  Enforcement Action Date: Not reported
  Remediation Underway: Not reported
  Monitoring Begun: Not reported
  Case Closed: Not reported
Abatement: No Action Taken

LUST Region SC:

Facility ID:	06S2W08Q03	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Lane Davis	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	S141		

CORTESE:
Reg By: LTNKA
Reg Id: 43-1630
Region: CORTESE

South Bay Region 2:

Facility ID:	43-1630	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported

WEST BAY CYCLES (Continued) **S101303815**

DOHS Initials: Not reported Map Number: Not reported
Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local agency is responsible for the cases but the case is not being activly overseen
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 1
National Priority List: NOT REPORTED
Primary Substance Spilled: Misc. Motor Vehicle Fuels
Secondary Substance Spilled: NOT REPORTED
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 400 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported
Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported

WEST BAY CYCLES (Continued) **S101303815**

Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

BA224
SW
> 1
8595
Higher

1450 PAGE MILL RD.
PALO ALTO, CA 94304

CHMIRS **S100280676**
N/A

CHMIRS:

OES Control Number:	9990681	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	CALCIUM CARBONATE		
Extent of Release:	Not reported		
CAS Number:	1317-65-3	Quantity Released:	50
Environmental Contamination:	Ground	Property Use:	Manufacturing
Incident Date:	10-FEB-88	Date Completed:	10-FEB-88

BA225
SW
> 1
8595
Higher

ALZA CORPORATION
1454 PAGE MILL ROAD
PALO ALTO, CA 94304

RCRIS-LQG **1000142177**
CERC-NFRAP **CAD061622783**
Cortese
HAZNET
Cal-Sites
LUST

CERCLIS-NFRAP Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not reported
Ownership Status:	Private	NPL Status:	Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	19880401

ALZA CORPORATION (Continued) **1000142177**

Assessment:	PRELIMINARY ASSESSMENT	Completed:	19890814
Assessment:	SITE INSPECTION	Completed:	19910529

CERCLIS-NFRAP Alias Name(s):
PREVIOUS EPA ID# CAD982400061

RCRIS:

Owner: STANFORD UNIVERSITY
(415) 555-1212

Contact: ENVIRONMENTAL MANAGER
(415) 494-5249

Record Date: 09/01/1996

Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1995

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	18883.00	D009	15.00
D022	1178.00	F002	18883.00
F003	18883.00	F005	18883.00

Used Oil Recyc: No

Violation Status: No violations found

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Misc. Motor Vehicle Fuels		
Lead Agency:	Regional Board		
Case Type:	Undefined		
Status:	No leak action taken by responsible party after initial report of leak		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	Not reported

ALZA CORPORATION (Continued) **1000142177**

CAL-SITES:
Facility ID 43280115
Status: REFRW - DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROLBOARD (RWQCB) LEAD
Status Date: 06/08/1994
Lead: Not reported
Region: 2 - BERKELEY
Branch: NC - NORTH COAST
File Name: Not reported
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agancy: N/A
NPL: Not reported
SIC: 28 MANU - CHEMICALS & ALLIED PRODUCTS
Facility Type: N/A
Facility Type Name: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF - SAN FRANCISCO BAY
Access: Uncontrolled
Cortese: U
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
No. of Contamintion Sources: 0.00000
Lat/Long: 0.00000 0.00000' 0.00000 / 0.00000 0.00000' 0.00000
Lat/long Method: Not reported
State Assembly District Code: Not reported
State Senate District: Not reported

HAZNET:
Year: 93
Gepaid: CAD061622783
Contact: Not reported
Gen County: Santa Clara
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County 99
Mailing Address: PO BOX 1328
COFFEYVILLE, KS 67337
Category: 801
Disposal Method: Not reported
Tepaid: KSD981506025
Telephone: (000) 000-0000
Tons: 0.41

CORTESE:
Reg By: LTNKA
Reg Id: 43-1981
Region: CORTESE

BB226 **SE** **> 1** **8672** **Higher**	**SHERMAN'S AUTO** **710 SAN ANTONIO RD** **PALO ALTO, CA**	**S Bay Reg. 2** **Cortese** **LUST**	**S101303814** **N/A**

SHERMAN'S AUTO (Continued) **S101303814**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	02/26/1993	Confirm Leak:	Not reported
Workplan:	11/18/1985	Prelim Assess:	Not reported
Pollution Char:	12/06/1991	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	11/18/1985

LUST Region 2:

File Number:	43-1343	Lat/Long:	37.407154 / -122.108456
Region:	2		
Entered Date:	21-APR-89	Last Review:	02/26/1993
Correspondence:	31-JAN-93	Report Date:	11/18/1985
Case Number:	06S2W17B03	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/19/1989
How Stopped:	Close Tank	Stopped Date:	02/19/1989
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Waste Oil
Maximum Soil Concentration:	930
Maximum Groundwater Impact:	Not reported
Current Benzene in Groundwater:	Not reported
Maximum Benzene Concentration:	Not reported
Nuber of Wells:	Not reported
Depth to Groundwater:	Not reported
MTBE Contamination Level:	Not reported
Maximum MTBE:	Not reported
Interim Remediation:	No
Interim Remediation Date:	Not reported
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	18-NOV-85
Assessment Underway:	Not reported
Pollution Characterization:	06-DEC-91
Corrective Action Plan:	Not reported
Enforcement Action Date:	Not reported
Remediation Underway:	Not reported
Monitoring Begun:	Not reported

SHERMAN'S AUTO (Continued) **S101303814**

Case Closed: Not reported
Abatement: No Action Taken
Comments: 1/89 COMPLAINT GAS FUMES

LUST Region SC:
Facility ID: 06S2W17B03 Region: Santa Clara
Facility Status: Active Oversight Facility Region: SANTA CLARA
Case Worker: Linda Dorn Closed Date: Not reported
Transfer Date: Not reported Entry Date: Not reported
Case Rank: 0241

CORTESE:
Reg By: LTNKA
Reg Id: 43-1343
Region: CORTESE

South Bay Region 2:
Facility ID: 43-1343 Staff: Not reported
Case Number: Not reported File Number: Not reported
Last Update: Not reported Case Type: Not reported
RWQCB Initials: Not reported EPA Contact: Not reported
DOHS Initials: Not reported Map Number: Not reported
Type: Only soil contamination has occurred and at such a low level as to not pose a threat to water quality
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 5
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Waste Oil
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: Not reported
Maximum Soil Concentration of Contaminates: 930 (parts per million)
Max Grndwater Concentration of Contaminates: 0 (parts per billion)
Benzene: 0
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported
Estimated % of Contaminants Contained: Not reported
Contaminant Source: Not reported
Contaminant Concentration as of: Not reported
Contaminant Concentration (1): Not reported

SHERMAN'S AUTO (Continued) **S101303814**

Well or Boring Number (1): Not reported
Initial Level Concentration (1): Not reported
Current Level Concentration (1): Not reported
Contaminant Concentration (2): Not reported
Well or Boring Number (2): Not reported
Initial Level Concentration (2): Not reported
Current Level Concentration (2): Not reported
Contaminant Concentration (3): Not reported
Well or Boring Number (3): Not reported
Initial Level Concentration (3): Not reported
Current Level Concentration (3): Not reported
Number of Municipal Wells: Not reported
Number of Private Wells: Not reported
Closure Name: Not reported
Closure Date: Not reported
Soil Action Needed Start Date: Not reported
Soil Action Needed End Date: Not reported
Onsite Water Action Needed: Not reported
Onsite Water Action Needed Start Date: Not reported
Onsite Water Action Needed End Date: Not reported
Off Site Water Action Needed: Not reported
Off Site Water Action Needed Start Date: Not reported
Off Site Water Action Needed End Date: Not reported
Estimated % of Contamination Concentration: Not reported
Enforcement & Regulatory Action (1): Not reported
Enforcement Action Date (1): Not reported
Enforcement & Regulatory Action (2): Not reported
Enforcement Action Date (2): Not reported
Enforcement & Regulatory Action (3): Not reported
Enforcement Action Date (3): Not reported
Enforcement & Regulatory Action (4): Not reported
Enforcement Action Date (4): Not reported
Enforcement & Regulatory Action (5): Not reported
Enforcement Action Date (5): Not reported
Enforcement & Regulatory Action (6): Not reported
Enforcement Action Date (6): Not reported
Enforcement & Regulatory Action (7): Not reported
Enforcement Action Date (7): Not reported
Enforcement & Regulatory Action (8): Not reported
Enforcement Action Date (8): Not reported
Enforcement & Regulatory Action (9): Not reported
Enforcement Action Date (9): Not reported
Enforcement & Regulatory Action (10): Not reported
Enforcement Action Date (10): Not reported
Immediate Response Actions: NOT REPORTED
Remediation: Not reported
Characterization Not reported
Comments Not reported

BB227 **SE** **> 1** **8707** **Higher**	**MOBIL SERVICE STATION** **4201 MIDDLEFIELD ROAD** **PALO ALTO, CA 94303**	**UST** **S Bay Reg. 2** **Cortese** **HAZNET** **LUST** **AST**	**U001595880** **N/A**

MOBIL SERVICE STATION (Continued) **U001595880**

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site, Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Pump and Treat Ground Water - generally employed to remove dissolved contaminants		
Review Date:	11/25/1997	Confirm Leak:	Not reported
Workplan:	09/29/1986	Prelim Assess:	03/29/1988
Pollution Char:	02/08/1991	Remed Plan:	Not reported
Remed Action:	01/11/1992	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	12/06/1985

LUST Region 2:

File Number:	43-0931	Lat/Long:	37.4159 / -122.1016
Region:	2		
Entered Date:	Not reported	Last Review:	01/07/1999
Correspondence:	04-DEC-98	Report Date:	12/06/1985
Case Number:	06S2W17B01	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	12/11/1986
How Stopped:	Close Tank	Stopped Date:	12/11/1986
Leak Source:	Tank	Leak Cause:	Structure Failure
Facility Status:	Pollution characterization		
Notify:	0		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

Primary Substance:	Gasoline
Secondary Substance:	Waste Oil
Maximum Soil Concentration:	760
Maximum Groundwater Impact:	6800
Current Benzene in Groundwater:	-1
Maximum Benzene Concentration:	16
Nuber of Wells:	15
Depth to Groundwater:	5.4
MTBE Contamination Level:	-1
Maximum MTBE:	790
Interim Remediation:	Yes
Interim Remediation Date:	25-JAN-91
Lead Agency:	Local Agency
Case List:	FUEL
Enforcement Type:	0
Enforcement Date:	Not reported
Responsible Party Search:	Solvent - Identified and financially capable of performing work.
Funding:	Federal

Date Status Was First Assigned - The following dates are assigned as the status progresses:

Leak Confirmed:	Not reported
Workplan Submitted:	29-SEP-86
Assessment Underway:	29-MAR-88
Pollution Characterization:	08-FEB-91
Corrective Action Plan:	Not reported

MOBIL SERVICE STATION (Continued) **U001595880**

Enforcement Action Date: Not reported
Remediation Underway: 11-JAN-92
Monitoring Begun: Not reported
Case Closed: Not reported

Abatement: Excavate and Dispose (landfill) of soil, Excavate and Treat soil. (e.g. aeration, biodegradation, etc.), Pump and Treat Ground Water
Comments: MAXSOIL/GW=GASOLINE. CASE CLOSED PER SCVWD - 12/2/98.

LUST Region SC:

Facility ID:	06S2W17B01	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Linda Dorn	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	Not reported
Case Rank:	O343		

CORTESE:

Reg By: LTNKA
Reg Id: 43-0931
Region: CORTESE

South Bay Region 2:

Facility ID:	43-0931	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported

Type: Other ground water or surface water is affected or threatened
Lead: Local Agency (Santa Clara Valley Water District
Facility Status: Not reported
Discovered Date: Not reported
Facility Description: Not reported
Phase of Work by Responsible Party: 7
National Priority List: NOT REPORTED
Primary Substance Spilled: Gasoline
Secondary Substance Spilled: Waste Oil
Problem Caused by UST: No
Contaminant Concentration Type (1): Not reported
Key Contaminant Concentration (1): Not reported
Initial Maximum Concentration (1): Not reported
Current Maximum Concentration (1): Not reported
Contaminant Concentration Type (2): Not reported
Key Contaminant Concentration (2): Not reported
Initial Maximum Concentration (2): Not reported
Current Maximum Concentration (2): Not reported
Contaminant Concentration Type (3): Not reported
Key Contaminant Concentration (3): Not reported
Initial Maximum Concentration (3): Not reported
Plume in Length (FT): Not reported
Size Depth (FT): Not reported
Municipal Drinking Wells Affected: Not reported
Private Drinking Wells Affected: Not reported
Current Maximum Concentration (3): Not reported
Historical Minimum Depth to Groundwater: 9 (Feet)
Maximum Soil Concentration of Contaminates: 770 (parts per million)
Max Grndwater Concentration of Contaminates: 100000 (parts per billion)
Benzene: 8500
Maximum Benzene: 0
Soil Action Needed: Not reported
Total of Extraction Flow Rate: Not reported

MOBIL SERVICE STATION (Continued) **U001595880**

Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

MOBIL SERVICE STATION (Continued) **U001595880**

State UST:

Facility ID:	39668		
Tank Num:	1	Container Num:	1
Tank Capacity:	10000	Year Installed:	1982
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test		
Contact Name:	PAUL D. KOBAYASHI	Telephone:	(415) 856-1773
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL

Facility ID:	39668		
Tank Num:	2	Container Num:	2
Tank Capacity:	8000	Year Installed:	1982
Tank Used for:	PRODUCT		
Type of Fuel:	REGULAR	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test		
Contact Name:	PAUL D. KOBAYASHI	Telephone:	(415) 856-1773
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL

Facility ID:	39668		
Tank Num:	3	Container Num:	3
Tank Capacity:	6000	Year Installed:	1982
Tank Used for:	PRODUCT		
Type of Fuel:	Not Reported	Tank Constrctn:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test		
Contact Name:	PAUL D. KOBAYASHI	Telephone:	(415) 856-1773
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL

Facility ID:	39668		
Tank Num:	4	Container Num:	4
Tank Capacity:	280	Year Installed:	Not reported
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	Visual		
Contact Name:	PAUL D. KOBAYASHI	Telephone:	(415) 856-1773
Total Tanks:	4	Region:	Not reported
Facility Type:	1	Other Type:	MOTOR VEHICLE FUEL

MOBIL SERVICE STATION (Continued) **U001595880**

AST:

Region:	2
Owner:	JIFFY LUBE INTERNATIONAL, INC. CALIFORNIA LUBRICANTS P.O. BOX 2967 HOUSTON, TX 77252

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
BB228 **SE** **> 1** **8736** **Higher**	**TOYOTA OF PALO ALTO** **690 SAN ANTONIO RD** **PALO ALTO, CA 94306**	**RCRIS-SQG** **FINDS** **UST** **Ca. FID** **S Bay Reg. 2** **Cortese** **HAZNET** **LUST**	**1000342897** **CAD981659212**

RCRIS:

Owner:	TOYOTA OF PALO ALTO (415) 555-1212
Contact:	ENVIRONMENTAL MANAGER (415) 494-2100
Record Date:	09/01/1996
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

State LUST:

Facility Type	ACTIVE	Cross Street:	Not reported
Reg Board:	San Francisco Bay Region	Qty Leaked:	Not reported
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Pollution characterization		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	10/08/1992	Confirm Leak:	Not reported
Workplan:	09/08/1992	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported	Release Date:	02/05/1992

LUST Region 2:

File Number:	43-0977	Lat/Long:	37.401652 / -122.112432
Region:	2		
Entered Date:	08-OCT-92	Last Review:	10/08/1992
Correspondence:	19-MAY-93	Report Date:	02/05/1992
Case Number:	06S2W17B05	Staff Initial:	CTH
How Discovered:	Tank Closure	Discovered Date:	02/05/1992
How Stopped:	Close Tank	Stopped Date:	02/05/1992
Leak Source:	Unknown	Leak Cause:	Unknown
Facility Status:	Pollution characterization		
Notify:	Not reported		
Update Status:	Not reported		
Review Status:	Not reported		
Priority:	Not reported		
Local Agency:	Santa Clara County		
Case Type:	Other ground water or surface water is affected or threatened		

TOYOTA OF PALO ALTO (Continued) **1000342897**

Primary Substance: Gasoline
Secondary Substance: Not reported
Maximum Soil Concentration: Not reported
Maximum Groundwater Impact: Not reported
Current Benzene in Groundwater: Not reported
Maximum Benzene Concentration: Not reported
Nuber of Wells: Not reported
Depth to Groundwater: Not reported
MTBE Contamination Level: Not reported
Maximum MTBE: Not reported
Interim Remediation: No
Interim Remediation Date: Not reported
Lead Agency: Local Agency
Case List: FUEL
Enforcement Type: 0
Enforcement Date: Not reported
Responsible Party Search: Solvent - Identified and financially capable of performing work.
Funding: Federal
Date Status Was First Assigned - The following dates are assigned as the status progresses:
- Leak Confirmed: Not reported
- Workplan Submitted: 08-SEP-92
- Assessment Underway: Not reported
- Pollution Characterization: Not reported
- Corrective Action Plan: Not reported
- Enforcement Action Date: Not reported
- Remediation Underway: Not reported
- Monitoring Begun: Not reported
- Case Closed: Not reported

Abatement: No Action Taken
Comments: SCVWD QMRP ONLY.

LUST Region SC:

Facility ID:	06S2W17B05	Region:	Santa Clara
Facility Status:	Active Oversight	Facility Region:	SANTA CLARA
Case Worker:	Linda Dorn	Closed Date:	Not reported
Transfer Date:	Not reported	Entry Date:	10/8/92
Case Rank:	O342		

HAZNET:

Year:	Not reported		
Gepaid:	CAD981659212	Tepaid:	CAD009452657
Contact:	Not reported	Telephone:	Not reported
Gen County:	Not reported	Tons:	194
Tsd Name:	ROMIC CHEMICAL CORP		
Tsd Address:	2081 BAY RD PALO ALTO		
Tsd County	Santa Clara		
Mailing Address:	Not reported		
Category:	352		
Disposal Method:	D99		

TOYOTA OF PALO ALTO (Continued) **1000342897**

Year: Not reported
Gepaid: CAD981659212 Tepaid: CAD980887418
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 594
Tsd Name: EVERGREEN OIL INC
Tsd Address: 6880 SMITH ST
NEWARK
Tsd County Alameda
Mailing Address: Not reported
Category: 134
Disposal Method: H01

Year: Not reported
Gepaid: CAD981659212 Tepaid: CAD980887418
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 311
Tsd Name: EVERGREEN OIL INC
Tsd Address: 6880 SMITH ST
NEWARK
Tsd County Alameda
Mailing Address: Not reported
Category: 134
Disposal Method: UNK

Year: Not reported
Gepaid: CAD981659212 Tepaid: CAD981694664
Contact: Not reported Telephone: Not reported
Gen County: Not reported Tons: 12
Tsd Name: ANTIFREEZE ENVIRONMENTAL SVC CORP
Tsd Address: 2081 BAY RD
E PALO ALTO
Tsd County Santa Clara
Mailing Address: Not reported
Category: 352
Disposal Method: D99

Year: 93
Gepaid: CAD981659212 Tepaid: CAD009456257
Contact: Not reported Telephone: Not reported
Gen County: Santa Clara Tons: 0.14
Tsd Name: Not reported
Tsd Address: Not reported
Tsd County 00
Mailing Address: Not reported
Category: 352
Disposal Method: Not reported

TOYOTA OF PALO ALTO (Continued) **1000342897**

Year:	93		
Gepaid:	CAD981659212	Tepaid:	CAD980887418
Contact:	Not reported	Telephone:	Not reported
Gen County:	Santa Clara	Tons:	6.02
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	Alameda		
Mailing Address:	Not reported		
Category:	134		
Disposal Method:	Not reported		

Year:	93		
Gepaid:	CAD981659212	Tepaid:	CAD981694664
Contact:	KEVIN MARTIN PROSECTS MGR	Telephone:	(415) 325-2666
Gen County:	Santa Clara	Tons:	0.12
Tsd Name:	Not reported		
Tsd Address:	Not reported		
Tsd County	Santa Clara		
Mailing Address:	PO BOX 50757 PALO ALTO, CA 94303		
Category:	352		
Disposal Method:	D99		

CORTESE:

Reg By:	LTNKA
Reg Id:	43-0977
Region:	CORTESE

South Bay Region 2:

Facility ID:	43-0977	Staff:	Not reported
Case Number:	Not reported	File Number:	Not reported
Last Update:	Not reported	Case Type:	Not reported
RWQCB Initials:	Not reported	EPA Contact:	Not reported
DOHS Initials:	Not reported	Map Number:	Not reported
Type:	Other ground water or surface water is affected or threatened		
Lead:	Local Agency (Santa Clara Valley Water District		
Facility Status:	Not reported		
Discovered Date:	Not reported		

Facility Description:	Not reported
Phase of Work by Responsible Party:	3
National Priority List:	NOT REPORTED
Primary Substance Spilled:	Gasoline
Secondary Substance Spilled:	NOT REPORTED
Problem Caused by UST:	No
Contaminant Concentration Type (1):	Not reported
Key Contaminant Concentration (1):	Not reported
Initial Maximum Concentration (1):	Not reported
Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported

TOYOTA OF PALO ALTO (Continued) **1000342897**

Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	Not reported
Maximum Soil Concentration of Contaminates:	0 (parts per million)
Max Grndwater Concentration of Contaminates:	0 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported
Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported

TOYOTA OF PALO ALTO (Continued) **1000342897**

Immediate Response Actions: NOT REPORTED

Remediation:	Not reported
Characterization	Not reported
Comments	Not reported

FID:

Facility ID:	43001465	Regulate ID:	00002316
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(415) 494-2100
Mail To:	Not reported 690 SAN ANTONIO RD PALO ALTO, CA 94306		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

State UST:

Facility ID:	2316		
Tank Num:	1	Container Num:	01
Tank Capacity:	1000	Year Installed:	1972
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor, None		
Contact Name:	ROLF VAN KEMPEN	Telephone:	(415) 494-2100
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	AUTO DLR

Facility ID:	2316		
Tank Num:	2	Container Num:	02
Tank Capacity:	500	Year Installed:	1972
Tank Used for:	WASTE		
Type of Fuel:	WASTE OIL	Tank Constrctn:	Not reported
Leak Detection:	Stock Inventor, None		
Contact Name:	ROLF VAN KEMPEN	Telephone:	(415) 494-2100
Total Tanks:	2	Region:	Not reported
Facility Type:	2	Other Type:	AUTO DLR

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229 West > 1 8862 Higher	**771 SERRA ST. STANFORD, CA 94305**	**CHMIRS**	**S100218371 N/A**

CHMIRS:

OES Control Number:	8910245	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	UNKNOWN		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	Not reported
Environmental Contamination:	Ground	Property Use:	Educational
Incident Date:	29-MAR-89	Date Completed:	29-MAR-89

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
E PALO ALTO	S102445124	RAINER SERVICE STATION	1905 BAYSHORE RD	94303	Ca. BI	
E. PALTO ALTO	1001115047	RAVENSWOOD INDUSTRIAL AREA	COR OF BAYROAD & ILLINOIS AVE.	94303	CERCLIS, FINDS	
MENLO PARK	S103587636	VICTORIA LANE SHOPPING CENTER	801 EL CAMINO REAL # 99	94025	LUST	41-0638
PALO ALTO	U001595970	SUN RAY FOREIGN AUTO SERVICE	325U ASH ST.	94306	UST	00000054846
PALO ALTO	91236899	BARREN CREEK	BARREN CREEK		ERNS	
PALO ALTO	1000251282	PACIFIC BELL	2850 BAYSHORE FRONTAGE	94303	RCRIS-SQG, FINDS	
PALO ALTO	S100927594	1X PALTO ALTO MAIN POST OFFICE	2085 EAST BAYSHORE AVENUE		HAZNET	CAC000799656
PALO ALTO	S103438250	NPD-VARIAN	601 CALIFORNIA AVE		Ca. WDS	2 438249002
PALO ALTO	S103472950	GALVEZ GAS STATION	900 EL CAMINO REAL	94301	LUST	06S3W02L02
PALO ALTO	S100944915	SHELL OIL CO #204-5802-1506	3601 EL CAMINO/ MATADERO	94306	HAZNET	CAL000122381
PALO ALTO	S102804439	CITY PALO ALTO	CORNER OF MATADERO /	94303	HAZNET	
PALO ALTO	S100930866	BLAISE CHIROPRACTIC, INC.	540 COWPER ST STE F	94301	HAZNET	CAL000078745
PALO ALTO	8873305	ON CREEK FR: EL CAMINO REAL RD *87	ON CREEK FR: EL CAMINO REAL RD *87		ERNS	
PALO ALTO	87463866	DRY CREEK BED/REAR :HOUSE	DRY CREEK BED/REAR :HOUSE		ERNS	
PALO ALTO	S100941832	PALO ALTO GAS RECOVERY C/O EDS	2380 EMBARCADERO RD	94303	HAZNET	CAL000045480
PALO ALTO	S102820479	WPI PACKAGING & MAINTENANCE INC	2390 EMBARCADERO ROAD	94303	HAZNET	
PALO ALTO	S100941839	PALO ALTO RECYCLING CENTER	2380 EMBARCADERO RD		HAZNET	CAL000071520
PALO ALTO	1000324051	PALO ALTO MUNI REFUSE DSPL AREA	2380 EMBARCADERO RD	94303	CERC-NFRAP, HAZNET, Cal-Sites	43490053
PALO ALTO	S103474035	STANFRORD HONDA	1766 EMBARCADERO RD	94303	LUST	05S2W31J02
PALO ALTO	S103439349	WDR-SOLID WASTE DISPOSAL SITE	SE END OF EMBARCADERO RD		Ca. WDS	2 438070001
PALO ALTO	S102803058	NORTH COUNTY COURTHOUSE/SANTA CLARA COU	270 GRANT ST		HAZNET	
PALO ALTO	S100927592	1X PALO ALTO UNIFIED SCHOOL DISTRICT	GUNN HIGH SCHOOL		HAZNET	CAC000187083
PALO ALTO	S103177378	STANFORD UNIVERSITY	HIGH TECH GAS LAB	94303	LUST	43-1385
PALO ALTO	S103285849	STANFORD UNIVERSITY	HIGH TECH GAS LAB	94303	LUST	
PALO ALTO	S102816838	PRODIGY PRESS INC	270 LAMBERT STREET		HAZNET	
PALO ALTO	S102798930	1X W F BATTON & CO INC	1121 EAST MEADOW DRIVE		HAZNET	
PALO ALTO	S102799241	1X MIDPENINSULA REG OPEN SPACE DIST	MONTE BELLO ROAD / PAGE MILL		HAZNET	
PALO ALTO	S102791540	1X PALO ALTO UNIFIED SCH. DISTRICT	PALO ALTO HIGH SCHOOL		HAZNET	
PALO ALTO	S102802076	BAY LAUREL INVESTMENT COMPANY	1121 SAN ANTONIO ROAD	94303	HAZNET	
PALO ALTO	S102801597	ANDY AND WORTH LUDWICK	491 SANTA RITA STREET		HAZNET	
SAN LUIS OBISPO	S102793213	SAN LUIS OBISPO COUNTY/ENVIRON HEALTH	QUESTA GRADE OFF HWY 101	94301	HAZNET	

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
D004	ARSENIC
D005	BARIUM
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D011	SILVER
D018	BENZENE
D021	CHLOROBENZENE
D022	CHLOROFORM
D029	1,1-DICHLOROETHYLENE
D030	2,4-DINITROTOLUENE
D035	METHYL ETHYL KETONE
D039	TETRACHLOROETHYLENE
D040	TRICHLOROETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

Code	Description
	TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F006	WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
F007	SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS
F008	PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
F019	WASTEWATER TREATMENT SLUDGES FROM THE CHEMICAL CONVERSION COATING OF ALUMINUM EXCEPT FROM ZIRCONIUM PHOSPHATING IN ALUMINUM CAN WASHING WHEN SUCH PHOSPHATING IS AN EXCLUSIVE CONVERSION COATING PROCESS.
F039	LEACHATE (LIQUIDS THAT HAVE PERCOLATED THROUGH LAND DISPOSED WASTES) RESULTING FROM THE DISPOSAL OF MORE THAN ONE RESTRICTED WASTE CLASSIFIED AS HAZARDOUS UNDER SUBPART D OF THIS PART. (LEACHATE RESULTING FROM THE

EPA Waste Codes Addendum

Code	Description
	DISPOSAL OF ONE OR MORE OF THE FOLLOWING EPA HAZARDOUS WASTES AND NO OTHER HAZARDOUS WASTES RETAINS ITS EPA HAZARDOUS WASTES NUMBER(S): F020, F021, F022, F026, F027, AND/OR F028).
P004	ALDRIN
P004	1,4,5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10,10-HEXACHLORO-1,4,4A,5,8,8A,-HEXAHYDRO-, (1ALPHA,4ALPHA,4ABETA,5ALPHA,8ALPHA,8ABETA)-
P030	CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED
P098	POTASSIUM CYANIDE
P098	POTASSIUM CYANIDE K(CN)
U223	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)
U223	TOLUENE DIISOCYANATE (R,T)

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/10/98
Date Made Active at EDR: 01/29/99
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/29/98
Elapsed ASTM days: 31
Date of Last EDR Contact: 03/03/99

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/98
Date Made Active at EDR: 01/18/99
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 01/13/99
Elapsed ASTM days: 5
Date of Last EDR Contact: 01/04/99

NPL: National Priority List
Source: EPA
Telephone: 703-603-8852

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 01/19/99
Date Made Active at EDR: 02/19/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/08/99
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/08/99

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 01/04/99
Date Made Active at EDR: 02/24/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/04/99
Elapsed ASTM days: 20
Date of Last EDR Contact: 03/31/99

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/01/98
Date Made Active at EDR: 01/29/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 12/28/98
Elapsed ASTM days: 32
Date of Last EDR Contact: 03/16/99

FEDERAL NON-ASTM RECORDS:

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/95
Database Release Frequency: Biennially
Date of Last EDR Contact: 03/25/99
Date of Next Scheduled EDR Contact: 06/21/99

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies
Database Release Frequency: Varies
Date of Last EDR Contact: Varies
Date of Next Scheduled EDR Contact: N/A

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA/NTIS
Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/08/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/16/99
Date of Next Scheduled EDR Contact: 07/12/99

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4526

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/97
Database Release Frequency: Annually
Date of Last EDR Contact: 03/24/99
Date of Next Scheduled EDR Contact: 04/26/99

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 12/08/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/02/99
Date of Next Scheduled EDR Contact: 05/31/99

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 02/22/98
Date of Next Scheduled EDR Contact: 05/24/99

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3936
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/22/97
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 03/05/99
Date of Next Scheduled EDR Contact: 05/17/99

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 03/15/99
Date of Next Scheduled EDR Contact: 06/14/99

ROD: Records Of Decision
Source: NTIS
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/31/95
Database Release Frequency: Annually
Date of Last EDR Contact: 02/16/99
Date of Next Scheduled EDR Contact: 04/19/99

TRIS: Toxic Chemical Release Inventory System
Source: EPA/NTIS
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/95
Database Release Frequency: Annually
Date of Last EDR Contact: 04/01/99
Date of Next Scheduled EDR Contact: 06/28/99

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-1444
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/94
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 03/17/99
Date of Next Scheduled EDR Contact: 06/14/99

STATE OF CALIFORNIA ASTM RECORDS:

BEP: Bond Expenditure Plan
Source: Department of Health Services
Telephone: 916-255-2118
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89
Date Made Active at EDR: 08/02/94
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 07/27/94
Elapsed ASTM days: 6
Date of Last EDR Contact: 05/31/94

CAL-SITES (AWP): Annual Workplan
Source: California Environmental Protection Agency
Telephone: 916-323-3400
Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 11/04/97
Date Made Active at EDR: 12/20/97
Database Release Frequency: Annually
Date of Data Arrival at EDR: 11/21/97
Elapsed ASTM days: 29
Date of Last EDR Contact: 02/02/99

CAL-SITES (ASPIS): Calsites
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 01/04/99
Date Made Active at EDR: 03/03/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 02/05/99
Elapsed ASTM days: 26
Date of Last EDR Contact: 12/08/98

CHMIRS: California Hazardous Material Incident Report System
Source: Office of Emergency Services
Telephone: 916-464-3277
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/94
Date Made Active at EDR: 04/24/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 03/13/95
Elapsed ASTM days: 42
Date of Last EDR Contact: 03/02/99

CORTESE: Cortese
Source: CAL EPA/Office of Emergency Information
Telephone: 916-327-1848
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/98
Date Made Active at EDR: 09/23/98
Database Release Frequency: Annually
Date of Data Arrival at EDR: 08/26/98
Elapsed ASTM days: 28
Date of Last EDR Contact: 02/03/99

LUST: Leaking Underground Storage Tank Information System
Source: State Water Resources Control Board
Telephone: 916-445-6532
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/31/99
Date Made Active at EDR: 04/02/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 03/05/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 02/08/99

NOTIFY 65: Proposition 65
Source: State Water Resources Control Board
Telephone: 916-657-0696
Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93 | Date of Data Arrival at EDR: 11/01/93
Date Made Active at EDR: 11/19/93 | Elapsed ASTM days: 18
Database Release Frequency: No Update Planned | Date of Last EDR Contact: 01/25/99

SWF/LF (SWIS): Solid Waste Information System
Source: Integrated Waste Management Board
Telephone: 916-255-4035
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/08/99 | Date of Data Arrival at EDR: 03/08/99
Date Made Active at EDR: 04/07/99 | Elapsed ASTM days: 30
Database Release Frequency: Quarterly | Date of Last EDR Contact: 03/08/99

TOXIC PITS: Toxic Pits
Source: State Water Resources Control Board
Telephone: 916-227-4364
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95 | Date of Data Arrival at EDR: 08/30/95
Date Made Active at EDR: 09/26/95 | Elapsed ASTM days: 27
Database Release Frequency: No Update Planned | Date of Last EDR Contact: 02/08/99

CA UST:

UST: Hazardous Substance Storage Container Database
Source: State Water Resources Control Board
Telephone: 916-227-4408
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90 | Date of Data Arrival at EDR: 01/25/91
Date Made Active at EDR: 02/12/91 | Elapsed ASTM days: 18
Database Release Frequency: No Update Planned | Date of Last EDR Contact: 01/22/99

FID: Facility Inventory Database
Source: California Environmental Protection Agency
Telephone: 916-445-6532
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94 | Date of Data Arrival at EDR: 09/05/95
Date Made Active at EDR: 09/29/95 | Elapsed ASTM days: 24
Database Release Frequency: No Update Planned | Date of Last EDR Contact: 12/28/98

WMUDS/SWAT: Waste Management Unit Database
Source: State Water Resources Control Board
Telephone: 916-227-4448
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 12/01/98 | Date of Data Arrival at EDR: 01/11/99
Date Made Active at EDR: 02/15/99 | Elapsed ASTM days: 35
Database Release Frequency: Quarterly | Date of Last EDR Contact: 03/24/99

STATE OF CALIFORNIA NON-ASTM RECORDS:

AST: Aboveground Petroleum Storage Tank Facilities
Source: State Water Resources Control Board
Telephone: 916-227-4382
Registered Aboveground Storage Tanks.

Date of Government Version: 02/22/99	Date of Last EDR Contact: 02/08/99
Database Release Frequency: Quarterly	Date of Next Scheduled EDR Contact: 05/10/99

HAZMAT: Hazmat Facilities
Source: City of San Jose Fire Department
Telephone: 408-277-4659

Date of Government Version: 09/21/98	Date of Last EDR Contact: 02/22/99
Database Release Frequency: Quarterly	Date of Next Scheduled EDR Contact: 05/24/99

HAZNET: Hazardous Waste Information System
Source: California Environmental Protection Agency
Telephone: 916-324-1781
Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/95	Date of Last EDR Contact: 02/05/99
Database Release Frequency: Annually	Date of Next Scheduled EDR Contact: 04/19/99

SOUTH BAY: South Bay Site Management System
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Groundwater pollution cases in the Santa Clara Valley where the regulatory lead is the San Francisco Bay Regional Water Quality Control Board.

Date of Government Version: 09/01/96	Date of Last EDR Contact: 03/15/99
Database Release Frequency: Annually	Date of Next Scheduled EDR Contact: 06/14/99

WDS: Waste Discharge System
Source: State Water Resources Control Board
Telephone: 916-657-1571
Sites which have been issued waste discharge requirements.

Date of Government Version: 01/06/99	Date of Last EDR Contact: 02/22/99
Database Release Frequency: Quarterly	Date of Next Scheduled EDR Contact: 05/24/99

CALIFORNIA COUNTY RECORDS

ALAMEDA COUNTY:

Underground Tanks
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 01/04/99
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 02/12/99
Date of Next Scheduled EDR Contact: 05/03/99

Local Oversight Program Listing of UGT Cleanup Sites
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 01/04/99
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 02/12/99
Date of Next Scheduled EDR Contact: 05/03/99

CONTRA COSTA COUNTY:

SL: Site List
Source: Contra Costa Health Services Department
Telephone: 925-646-2286
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/04/99
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 03/08/99
Date of Next Scheduled EDR Contact: 06/07/99

KERN COUNTY:

UST: Sites & Tanks Listing
Source: Kern County Environment Health Services Department
Telephone: 805-862-8700
Kern County Sites and Tanks Listing.

Date of Government Version: 03/04/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/08/99
Date of Next Scheduled EDR Contact: 06/07/99

LOS ANGELES COUNTY:

HMS: Street Number List
Source: Department of Public Works
Telephone: 626-458-3517
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/30/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/12/99
Date of Next Scheduled EDR Contact: 07/12/99

SWF/LF: List of Solid Waste Facilities
Source: La County Department of Public Works
Telephone: 818-458-5185

Date of Government Version: 09/16/98
Database Release Frequency: Annually
Date of Last EDR Contact: 02/22/99
Date of Next Scheduled EDR Contact: 05/24/99

Site Mitigation List
Source: Community Health Services
Telephone: 213-890-7806
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/20/98
Database Release Frequency: Annually

Date of Last EDR Contact: 02/22/99
Date of Next Scheduled EDR Contact: 05/24/99

MARIN COUNTY:

UST Sites
Source: Public Works Department Waste Management
Telephone: 415-499-6647
Currently permitted USTs in Marin County.

Date of Government Version: 03/01/99
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/10/99
Date of Next Scheduled EDR Contact: 05/10/99

NAPA COUNTY:

LUST: Sites With Reported Contamination
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 10/27/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/22/99
Date of Next Scheduled EDR Contact: 06/21/99

UST: Closed and Operating Underground Storage Tank Sites
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 02/17/98
Database Release Frequency: Annually

Date of Last EDR Contact: 03/22/99
Date of Next Scheduled EDR Contact: 06/21/99

ORANGE COUNTY:

List of Industrial Site Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Petroleum and non-petroleum spills.

Date of Government Version: 10/14/98
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/15/99
Date of Next Scheduled EDR Contact: 06/14/99

LUST: List of Underground Storage Tank Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/04/99
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/15/99
Date of Next Scheduled EDR Contact: 06/14/99

UST: List of Underground Storage Tank Facilities
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/24/99
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/15/99
Date of Next Scheduled EDR Contact: 06/14/99

PLACER COUNTY:

MS: Master List of Facilities

Source: Placer County Health and Human Services
Telephone: 530-889-7335
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 01/20/99
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 03/30/99
Date of Next Scheduled EDR Contact: 06/28/99

RIVERSIDE COUNTY:

LUST: Listing of Underground Tank Cleanup Sites

Source: Department of Public Health
Telephone: 909-358-5055
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/06/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/25/99
Date of Next Scheduled EDR Contact: 04/26/99

UST: Tank List

Source: Health Services Agency
Telephone: 909-358-5055

Date of Government Version: 01/06/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/25/99
Date of Next Scheduled EDR Contact: 04/26/99

SACRAMENTO COUNTY:

Toxisite List

Source: Sacramento County Environmental Management
Telephone: 916-875-8450

Date of Government Version: 12/01/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 12/15/98
Date of Next Scheduled EDR Contact: 05/10/99

ML: Regulatory Compliance Master List

Source: Sacramento County Environmental Management
Telephone: 916-875-8450
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 01/06/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/08/99
Date of Next Scheduled EDR Contact: 08/09/99

SAN BERNARDINO COUNTY:

DEHS Permit System Print-Out By Location

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 01/04/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/15/99
Date of Next Scheduled EDR Contact: 06/14/99

SAN DIEGO COUNTY:

SWF/LF: Solid Waste Facilities
Source: Department of Health Services
Telephone: 619-338-2209
San Diego County Solid Waste Facilities.

Date of Government Version: 07/01/98 | Date of Last EDR Contact: 03/05/99
Database Release Frequency: Annually | Date of Next Scheduled EDR Contact: 05/31/99

HMMD: Hazardous Materials Management Division Database
Source: Hazardous Materials Management Division
Telephone: 619-338-2268
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 01/04/99 | Date of Last EDR Contact: 04/12/99
Database Release Frequency: Quarterly | Date of Next Scheduled EDR Contact: 07/12/99

SAN FRANCISCO COUNTY:

LUST: Local Oversite Facilities
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

Date of Government Version: 01/05/99 | Date of Last EDR Contact: 01/08/99
Database Release Frequency: Quarterly | Date of Next Scheduled EDR Contact: 04/19/99

Underground Storage Tank Information
Source: Department of Public Health
Telephone: 415-252-3920

Date of Government Version: 02/01/99 | Date of Last EDR Contact: 02/17/99
Database Release Frequency: Quarterly | Date of Next Scheduled EDR Contact: 05/17/99

SAN MATEO COUNTY:

Business Inventory
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 04/01/98 | Date of Last EDR Contact: 02/16/99
Database Release Frequency: Annually | Date of Next Scheduled EDR Contact: 04/19/99

LUST: Fuel Leak List
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

Date of Government Version: 01/04/99 | Date of Last EDR Contact: 02/08/99
Database Release Frequency: Semi-Annually | Date of Next Scheduled EDR Contact: 05/03/99

SANTA CLARA COUNTY:

LUST: Fuel Leak Site Activity Report
Source: Santa Clara Valley Water District
Telephone: 408-927-0710

Date of Government Version: 12/01/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/12/99
Date of Next Scheduled EDR Contact: 07/12/99

SOLANO COUNTY:

LUST: Leaking Undergroung Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 02/25/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 02/25/99
Date of Next Scheduled EDR Contact: 06/21/99

UST: Underground Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 02/17/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 02/25/99
Date of Next Scheduled EDR Contact: 06/21/99

SONOMA COUNTY:

LUST Sites
Source: Department of Health Services
Telephone: 707-525-6565

Date of Government Version: 02/23/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 02/08/99
Date of Next Scheduled EDR Contact: 05/03/99

SUTTER COUNTY:

UST: Underground Storage Tanks
Source: Sutter County Department of Agriculture
Telephone: 530-741-7504

Date of Government Version: 01/04/99
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/12/99
Date of Next Scheduled EDR Contact: 07/12/99

VENTURA COUNTY:

BWT: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/28/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/22/98
Date of Next Scheduled EDR Contact: 06/21/99

LUST: Listing of Underground Tank Cleanup Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 12/30/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/22/99
Date of Next Scheduled EDR Contact: 06/21/99

UST: Underground Tank Closed Sites List
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 12/29/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/22/99
Date of Next Scheduled EDR Contact: 06/21/99

SWF/LF: Inventory of Illegal Abandoned and Inactive Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 06/01/97
Database Release Frequency: Annually
Date of Last EDR Contact: 03/02/99
Date of Next Scheduled EDR Contact: 05/31/99

California Regional Water Quality Control Board (RWQCB) LUST Records

LUST REG 1: Active Toxic Site Investigation
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220

Date of Government Version: 10/14/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/05/99
Date of Next Scheduled EDR Contact: 05/31/99

LUST REG 2: Fuel Leak List
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457

Date of Government Version: 01/04/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/28/99
Date of Next Scheduled EDR Contact: 04/19/99

LUST REG 3: LUSTIS Database
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147

Date of Government Version: 02/01/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 02/23/99
Date of Next Scheduled EDR Contact: 05/24/99

LUST REG 4: Underground Storage Tank Leak List
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-266-7544

Date of Government Version: 02/26/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/02/99
Date of Next Scheduled EDR Contact: 05/31/99

LUST REG 5: Leaking Underground Storage Tank Database
Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-255-3125

Date of Government Version: 01/20/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/12/99
Date of Next Scheduled EDR Contact: 07/12/99

LUST REG 6L: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424

Date of Government Version: 12/01/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/15/99
Date of Next Scheduled EDR Contact: 04/12/99

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491

Date of Government Version: 02/04/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/12/99
Date of Next Scheduled EDR Contact: 07/12/99

LUST REG 7: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491

Date of Government Version: 11/01/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 03/02/99
Date of Next Scheduled EDR Contact: 05/31/99

LUST REG 8: (LUSTIS) Leaking Underground Storage Tanks
Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4498

Date of Government Version: 01/19/99
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/12/99
Date of Next Scheduled EDR Contact: 07/12/99

LUST REG 9: Leaking Underground Storage Tank Report
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 619-467-2952

Date of Government Version: 01/21/99
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/29/99
Date of Next Scheduled EDR Contact: 04/26/99

California Regional Water Quality Control Board (RWQCB) SLIC Records

SLIC REG 1: Active Toxic Site Investigations
Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220

Date of Government Version: 10/14/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/05/99
Date of Next Scheduled EDR Contact: 05/31/99

SLIC REG 2: North and South Bay Slic Report
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 01/04/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/28/99
Date of Next Scheduled EDR Contact: 04/19/99

SLIC REG 3: SLIC Data
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 02/01/99
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 02/23/99
Date of Next Scheduled EDR Contact: 05/24/99

SLIC REG 4: SLIC Sites
Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-266-7544
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 02/01/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/11/99
Date of Next Scheduled EDR Contact: 05/03/99

SLIC REG 5: SLIC List
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-855-3075
Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 10/01/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/15/99
Date of Next Scheduled EDR Contact: 07/12/99

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583

Date of Government Version: 12/01/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/12/99
Date of Next Scheduled EDR Contact: 07/12/99

SLIC REG 8: SLIC List
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-3298

Date of Government Version: 10/31/97
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/15/99
Date of Next Scheduled EDR Contact: 07/12/99

SLIC REG 9: WDS NURD List
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 619-467-2980

Date of Government Version: 12/01/98
Database Release Frequency: Annually
Date of Last EDR Contact: 03/12/99
Date of Next Scheduled EDR Contact: 06/07/99

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

DELISTED NPL: NPL Deletions
Source: EPA
Telephone: 703-603-8769
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/19/99
Date Made Active at EDR: 02/19/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 02/08/99
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/08/99

NFRAP: No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 11/10/98
Date Made Active at EDR: 01/29/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 12/29/98
Elapsed ASTM days: 31
Date of Last EDR Contact: 03/03/99

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1996 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in March 1997 from the U.S. Fish and Wildlife Service.

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Appendix D

APPENDIX D

SAMPLING PROTOCOL AND ANALYTICAL RESULTS

Ground water samples were collected using a Teflon bailer and placed in appropriate sample bottles which were labeled with a unique identification number. The samples were then placed in an ice-chilled cooler, and transported to a state-certified analytical laboratory with chain of custody documentation. Attached are copies of the analytical results and the chain of custody forms.

All sampling equipment was cleaned in a solution of laboratory grade detergent and distilled water before use at each sampling point.

Entech Analytical Labs, Inc. CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attn: Belinda Blackie

Date: 6/28/99
Date Received: 6/21/99
Project: Matadero Creek
Job #: 1453-1A
Sampled By: Client

Certified Analytical Report

Water Sample Analysis:

Sample ID	**LA-1**			**LA-5**							
Sample Date	6/21/99			6/21/99							
Sample Time											
Lab #	**G13650**			**G13651**							
	Result	DF	DLR	Result	DF	DLR				PQL	Method
Results in µg/Liter:											
Analysis Date	6/23/99			6/23/99							
Total TPH-Extractable	**180**			**ND**							8015M
Individual TPH Results:											
TPH-Diesel	**ND**	1.0	50	**ND**	1.0	50				50	8015M
TPH-Motor Oil	**ND**	1.0	250	**ND**	1.0	250				250	8015M
TPH-Bunker Oil	**ND**	1.0	50	**ND**	1.0	50				50	8015M
TPH-Jet Fuel (JP-5)	**ND**	1.0	50	**ND**	1.0	50				50	8015M
TPH-Stoddard	**180** ^{x}	1.0	50	**ND**	1.0	50				50	8015M
TPH-Hydraulic Oil	**ND**	1.0	250	**ND**	1.0	250				250	8015M
TPH-Fuel Oil	**ND**	1.0	50	**ND**	1.0	50				50	8015M
Results in µg/Liter:											
Analysis Date	6/23/99			6/22/99							
Total TPH-Purgeable	**150**			**ND**							8015M
Individual TPH Results:											
TPH-Gas	**ND**	1.0	50	**ND**	1.0	50				50	8015M
TPH-Aviation Gas	**ND**	1.0	50	**ND**	1.0	50				50	8015M
TPH-Mineral Spirits	**150**	1.0	50	**ND**	1.0	50				50	8015M
Analysis Date	6/23/99			6/22/99							
MTBE	**ND**	1.0	5.0	**ND**	1.0	5.0				5.0	8020
Benzene	**ND**	1.0	0.50	**ND**	1.0	0.50				0.50	8020
Toluene	**ND**	1.0	0.50	**ND**	1.0	0.50				0.50	8020
Ethyl Benzene	**ND**	1.0	0.50	**ND**	1.0	0.50				0.50	8020
Xylenes	**1.9**	1.0	0.50	**ND**	1.0	0.50				0.50	8020

DF=Dilution Factor ND=None detected above DLR PQL=Practical Quantitation Limit DLR=Detection Reporting Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Lab Director

Entech Analytical Labs, Inc. CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

STANDARD LAB QUALIFIERS
July, 1998

All Entech lab reports now reference standard lab qualifiers. These qualifiers are noted in the adjacent column to the analytical result and are adapted from the U.S. EPA CLP program. The current qualifier list is as follows:

Qualifier	**Description**
U	Compound was analyzed for but not detected
J	Estimated valued for tentatively identified compounds or if result is below PQL but above MDL
N	Presumptive evidence of a compound (for Tentatively Identified Compounds)
B	Analyte is found in the associated Method Blank
E	Compounds whose concentrations exceed the upper level of the calibration range
D	Multiple dilutions reported for analysis; discrepancies between analytes may be due to dilution
X	Results within quantitation range; chromatographic pattern not typical of fuel

Entech Analytical Labs, Inc. **CA ELAP# I-2346**

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

June 28, 1999

Belinda Blackie
Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Subject:	1 Water Sample
Lab #'s:	G13650
Project Name:	Matadero Creek
Project Number:	1453-1A
P.O. Number:	
Method(s):	EPA 8010

Dear Belinda Blackie,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#I-2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michelle L. Anderson
Lab Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc. **CA ELAP# I-2346**

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report
Purgeable Halocarbons by EPA Method 8010

Client: Lowney Associates
Sample Matrix: Water
Sample Date/Time: 6/21/99
Lab #: G13650
Client ID: LA-1

Date Reported: 6/28/99
Date Received: 6/21/99
Date Analyzed: 6/22/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	**ND**	0.5	0.5	**trans-1,2-Dichloroethene**	**ND**	0.5	0.5
Bromoform	**ND**	1.0	1.0	**1,2-Dichloropropane**	**ND**	0.5	0.5
Bromomethane	**ND**	1.0	1.0	**cis-1,3-Dichloropropene**	**ND**	0.5	0.5
Carbon Tetrachloride	**ND**	0.5	0.5	**trans-1,3-Dichloropropene**	**ND**	0.5	0.5
Chlorobenzene	**ND**	0.5	0.5	**Methylene Chloride**	**ND**	3.0	3.0
Chloroethane	**ND**	1.0	1.0	**1,1,2,2-Tetrachloroethane**	**ND**	0.5	0.5
Chloroform	**ND**	1.0	1.0	**Tetrachloroethene**	**ND**	0.5	0.5
Chloromethane	**ND**	0.5	0.5	**1,1,1-Trichloroethane**	**ND**	0.5	0.5
Dibromochloromethane	**ND**	1.0	1.0	**1,1,2-Trichloroethane**	**ND**	0.5	0.5
Dichlorodifluoromethane	**ND**	0.5	0.5	**Trichloroethene**	**ND**	0.5	0.5
1,2-Dichlorobenzene	**ND**	0.5	0.5	**Trichlorofluoromethane**	**ND**	0.5	0.5
1,3-Dichlorobenzene	**ND**	0.5	0.5	**Vinyl Chloride**	**ND**	1.0	1.0
1,4-Dichlorobenzene	**ND**	0.5	0.5				
1,1-Dichloroethane	**ND**	0.5	0.5				
1,2-Dichloroethane	**ND**	0.5	0.5				
1,1-Dichloroethene	**ND**	0.5	0.5				
cis-1,2-Dichloroethene	**ND**	0.5	0.5				

Surrogate	Recovery (%)
2-Bromo-1-Chloropropane	119

1. Results are reported in ug/Liter (ppb)
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)

Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit
PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography - Volatile Organics

QC Batch #:	VOC2W990621	Date Analyzed:	06/21/99
Matrix:	Water	Quality Control Sample:	Blank Spike
Units:	µg/L		

PARAMETER	Method #	SA µg/L	SR µg/L	SP µg/L	**SP % R**	SPD µg/L	**SPD %R**	RPD	QC LIMITS RPD	QC LIMITS %R
Benzene	602/8020	40	ND	39	**98**	38	95	3.1	25	82-114
Chlorobenzene	601/8010	40	ND	43	**106**	39	97	8.8	25	82-123
1,1-Dichloroethane	601/8010	40	ND	43	**106**	40	**100**	6.6	25	82-130
Toluene	602/8020	40	ND	37	**92**	36	90	2.5	25	80-120
Trichloroethene	601/8010	40	ND	43	**107**	38	94	12.7	25	75-127
2-Bromo-1-chloropropane	601/8010		93%	99%		91%				75-125
aaa-Trifluorotoluene	602/8020		111%	115%		108%				75-125

Note: LCS and LCSD results reported for the following Parameters:
All

Definition of Terms:

na:	Not Analyzed in QC batch
SA:	Spike Added
SR:	Sample Result
RPD(%):	Duplicate Analysis - Relative Percent Difference
SP:	Spike Result
SP (%R):	Spike % Recovery
SPD:	Spike Duplicate Result
SPD (%R):	Spike Duplicate % Recovery
NC:	Not Calculated

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography
Laboratory Control Spikes

QC Batch #: DW990610
Matrix: Water
Units: μg/L

Date analyzed: 06/22/99
Date extracted: 06/22/99
Quality Control Sample: Blank Spike

PARAMETER	Method #	MB μg/L	SA μg/L	SR μg/L	SP μg/L	**SP %R**	SPD μg/L	**SPD %R**	RPD	QC LIMITS RPD	QC LIMITS %R
Diesel	8015M	<50.0	950	ND	1150	**121**	984	**104**	15.6	25	58-130

Definition of Terms:
na: Not Analyzed in QC batch
MB: Method Blank
SA: Spike Added
SR: Sample Result
RPD(%): Duplicate Analysis - Relative Percent Difference
SP: Spike Result
SP (%R) Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R) Spike Duplicate % Recovery
NC: Not Calculated

Entech Analytical Labs, Inc.

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Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG2990622
Matrix: Water
Units: µg/L

Date Analyzed: 06/22/99
Quality Control Sample: Blank Spike

PARAMETER	Method #	MB µg/L	SA µg/L	SR µg/L	SP µg/L	**SP % R**	SPD µg/L	**SPD %R**	RPD	QC LIMITS RPD	QC LIMITS %R
Benzene	8020	<0.50	5.0	ND	4.2	**84**	4.1	**83**	1.9	25	73-117
Toluene	8020	<0.50	25.0	ND	26	**105**	27	**108**	2.8	25	79-121
Ethyl Benzene	8020	<0.50	5.0	ND	5.2	**105**	5.2	**103**	1.3	25	77-114
Xylenes	8020	<0.50	25.0	ND	28	**111**	28	**113**	2.0	25	79-120
Gasoline	8015	<50.0	500	ND	457	**91**	482	**96**	5.2	25	75-125
aaa-TFT(S.S.)-PID	8020			102%	89%		98%				65-135
aaa-TFT(S.S.)-FID	8015			106%	91%		100%				65-135

Note: LCS and LCSD results reported for the following Parameters:
All

Definition of Terms:

na: Not Analyzed in QC batch
MB: Method Blank
SA: Spike Added
SR: Sample Result
RPD(%): Duplicate Analysis - Relative Percent Difference
SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike % Recovery
NC: Not Calculated

LOWNEYASSOCIATES

CHAIN OF CUSTODY RECORD

SEND RESULTS TO: ☒ Mountain View Office
405 Clyde Ave
Mountain View, Ca 94043
415-967-2365
FAX COPY: ☒ 415-967-2785 (FAX)

Project Name: Matadero Creek

Job No.: 1453-1A

Report To: Belinda Blackie

Sampler (print): Gretchen Snoey

Sampler (signature):

QC Requirements:

☒ Level A (standard) ☐ Level B ☐ Level C ☐ Level D

Turnaround Requirements:

☐ 10 Working days
☒ 5 Working days
☐ 3 Working days
☐ 48 Hours
☐ 24 Hours
☐ 2-3 Hours (RUSH)

ANALYSIS REQUESTED

Sample I.D.	Date	Time	Lab I.D.	Sample Matrix	No. of Cont.	TPH as gas/BTEX (8015/8020)	TPH as diesel (8015M)	TRPH (5520) E/F	Halogenated VOCs (8010)	Purgeable Organics (8240)	Extractable Organics (8270)	fuel fp/BTEX/MTBE	8010								Remar
LA-1	6/21/99		G136050	water	8							✓	✓								
LA-5	6/21/99		G136051	water	5							✓									

Relinquished By: | Date: 6/21/99 | Time: 1:45

Relinquished By: | Date: | Time:

Relinquished By: | Date: | Time:

Received By: | Date: | Time:

Received By: | Date: | Time:

Lab Of Record: Entech

Received By Lab: | Date: 6/21/99 | Time: 4:55PM

PM Initial:

Temperatu

Entech Analytical Labs, Inc. CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attn: Gretchen Snoey

Date: 7/13/99
Date Received: 7/9/99
Project: Matadero Creek
Job #: 1453-1A
Sampled By: Client

Certified Analytical Report

Water Sample Analysis:

Sample ID	**MW-1**										
Sample Date	7/9/99										
Sample Time											
Lab #	**15185-001**										
	Result	DF	DLR							PQL	Method
Results in µg/Liter:											
Analysis Date	7/12/99										
Total TPH-Extractable	**ND**										8015M
Individual TPH Results:											
TPH-Diesel	**ND**	1.0	50							50	8015M
TPH-Motor Oil	**ND**	1.0	250							250	8015M
TPH-Bunker Oil	**ND**	1.0	50							50	8015M
TPH-Jet Fuel (JP-5)	**ND**	1.0	50							50	8015M
TPH-Stoddard	**ND**	1.0	50							50	8015M
TPH-Hydraulic Oil	**ND**	1.0	250							250	8015M
TPH-Fuel Oil	**ND**	1.0	50							50	8015M
Analysis Date	7/10/99										
Total TPH-Purgeable	**ND**										8015M
Individual TPH Results:											
TPH-Gas	**ND**	1.0	50							50	8015M
TPH-Aviation Gas	**ND**	1.0	50							50	8015M
TPH-Mineral Spirits	**ND**	1.0	50							50	8015M
Analysis Date	7/10/99										
MTBE	**ND**	1.0	5.0							5.0	8020
Benzene	**ND**	1.0	0.50							0.50	8020
Toluene	**ND**	1.0	0.50							0.50	8020
Ethyl Benzene	**ND**	1.0	0.50							0.50	8020
Xylenes	**0.52**	1.0	0.50							0.50	8020

DF=Dilution Factor ND=None detected above DLR PQL=Practical Quantitation Limit DLR=Detection Reporting Limit

' Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Lab Director

Entech Analytical Labs, Inc. CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

July 13, 1999

Gretchen Snoey
Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Subject:	1 Water Sample
Lab #'s:	15185-001
Project Name:	Matadero Creek
Project Number:	1453-1A
P.O. Number:	
Method(s):	EPA 8010

Dear Gretchen Snoey,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#I-2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michelle L. Anderson
Lab Director

Entech Analytical Labs, Inc. CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report
Purgeable Halocarbons by EPA Method 8010

Client: Lowney Associates
Sample Matrix: Water
Sample Date/Time: 7/9/99
Lab #: 15185-001
Client ID: MW-1

Date Reported: 7/13/99
Date Received: 7/9/99
Date Analyzed: 7/11/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.5	0.5	**trans-1,2-Dichloroethene**	ND	0.5	0.5
Bromoform	ND	1.0	1.0	**1,2-Dichloropropane**	ND	0.5	0.5
Bromomethane	ND	1.0	1.0	**cis-1,3-Dichloropropene**	ND	0.5	0.5
Carbon Tetrachloride	ND	0.5	0.5	**trans-1,3-Dichloropropene**	ND	0.5	0.5
Chlorobenzene	ND	0.5	0.5	**Methylene Chloride**	ND	3.0	3.0
Chloroethane	ND	1.0	1.0	**1,1,2,2-Tetrachloroethane**	ND	0.5	0.5
Chloroform	ND	1.0	1.0	**Tetrachloroethene**	ND	0.5	0.5
Chloromethane	ND	0.5	0.5	**1,1,1-Trichloroethane**	ND	0.5	0.5
Dibromochloromethane	ND	1.0	1.0	**1,1,2-Trichloroethane**	ND	0.5	0.5
Dichlorodifluoromethane	ND	0.5	0.5	**Trichloroethene**	ND	0.5	0.5
1,2-Dichlorobenzene	ND	0.5	0.5	**Trichlorofluoromethane**	ND	0.5	0.5
1,3-Dichlorobenzene	ND	0.5	0.5	**Vinyl Chloride**	ND	1.0	1.0
1,4-Dichlorobenzene	ND	0.5	0.5				
1,1-Dichloroethane	ND	0.5	0.5				
1,2-Dichloroethane	ND	0.5	0.5				
1,1-Dichloroethene	ND	0.5	0.5				
cis-1,2-Dichloroethene	ND	0.5	0.5				

Surrogate	Recovery (%)
2-Bromo-1-Chloropropane	100

1. Results are reported in ug/Liter (ppb)
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)

Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit
PQL: Practical Quantitation Limit
DF: Dilution Factor

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CHAIN OF CUSTODY RECORD

Send Results To: ☒ Mountain View Office
405 Clyde Avenue
Mountain View, CA 94043
415-967-2365
Fax Copy To: ☒ 415-967-2785 (fax)

☐ Oakland Office
129 Filbert Street
Oakland, CA 94607
510-267-1970
☐ 510-267-1972 (fax)

Project Name: Matadero Creek

Job Number: 1453-1A

eport To: Gretchen Susey

ampler (print): Paul Reginato

ampler (signature):

C Requirements: ☒ Level A (standard) ☐ Level B ☐ Level C ☐ Level D

Turnaround Requirements

☐ 10 working days
☐ 5 working days
☐ 3 working days
☒ 48 hours
☐ 24 hours
☐ 2-3 hours (RUSH)

ANALYSIS REQUESTED

RUSH

Sample I.D.	Date	Time	Sample Matrix	# of Cont.	Laboratory I.D.	Fuel Fingerprint	BTEX/MTBE	VOCs (8010)	Remarks
MW-1	7/09/99		Water	8		X	X	X	
15185-001									

elinquished By: Date: 7/09/99 Time: 14:50

Received By: Date: 7-9 Time: 1500

PM Initials

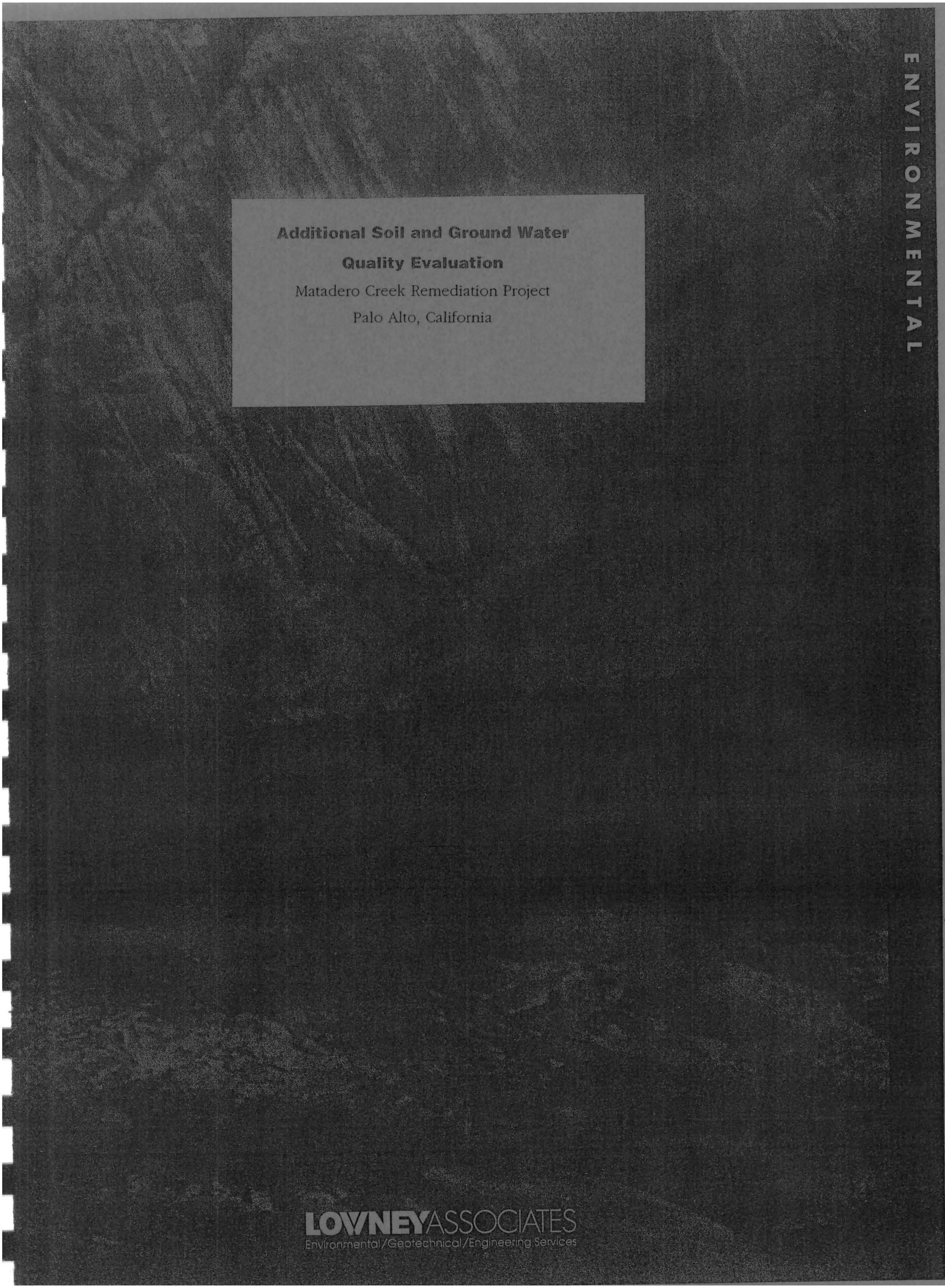
elinquished By: Date: Time:

Received By: Date: Time:

elinquished By: Date: Time:

Lab of Record: BNBCM

Temperature



Additional Soil and Ground Water Quality Evaluation

Matadero Creek Remediation Project

Palo Alto, California

ENVIRONMENTAL

LOWNEYASSOCIATES

Environmental/Geotechnical/Engineering Services

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

Additional Soil and Ground Water Quality Evaluation

Matadero Creek Remediation Project
Palo Alto, California

This report has been prepared for:

Schaaf & Wheeler
100 North Winchester Boulevard, Suite 200, Santa Clara, California 95050

September 4, 2001
Project No. 1453-1F

Kurt Soenen

Kurt M. Soenen
Staff Environmental Engineer

Leonardo Alvarez, R.G., C.E.G.
Senior Project Geologist

Stason I. Foster, P.E.
Principal Environmental Engineer
Quality Assurance Reviewer

REGISTERED GEOLOGIST
L. ALVAREZ
No. 595
Certified Engineering
GEOLOGIST
EXP. 4/30/02
STATE OF CALIFORNIA

Mountain View *Oakland* *Fullerton* *San Ramon*

405 Clyde Avenue Mountain View, CA 94043-2209 Tel: 650.967.2365 Fax: 650.967.2785
P.O. Box 1388 Mountain View, CA 94042-1388 E-mail: mail@lowney.com

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ADDITIONAL SOIL AND GROUND WATER QUALITY EVALUATION
MATADERO CREEK REMEDIATION PROJECT
PALO ALTO, CALIFORNIA

1.0 INTRODUCTION

1.1 Purpose

In this report, we present the results of the additional soil and ground water quality evaluation performed for the Matadero Creek Remediation Project near the Palo Alto Municipal Service Center (PAMSC) in Palo Alto, California. This work was performed for Schaaf & Wheeler who is assisting the Santa Clara Valley Water District (SCVWD).

1.2 Site Background

Based on the evaluation of three construction alternatives for remediating flood control issues for Matadero Creek in Palo Alto, we understand Alternative No. 2 was selected as the preferred remedial scenario. Under this alternative, soil will be excavated for a bypass channel along the north and east sides of the PAMSC, located at 3201 East Bayshore Road.

In November 1999, Lowney Associates performed a limited Phase I environmental site assessment of the PAMSC and the results are summarized as follows. The property is bounded by Matadero Creek to the northwest, dense brush and marshland to the northeast and southeast, and East Bayshore Road to the southwest. PAMSC was generally developed with three service and office buildings, materials storage areas, hazardous waste storage area, transformer storage area, fuel tank storage area, and employee parking area. In general, numerous vehicles, construction equipment, construction materials, and other miscellaneous items were located throughout the facility.

The vehicle maintenance warehouse was the northernmost building (Building B). Work performed on vehicles was done on eight subsurface hydraulic lifts and three above-ground hydraulic lifts. Numerous types of vehicle maintenance equipment, tools, and materials, including three automobile parts washing sinks were observed throughout the warehouse. Three 2-gallon containers of hydraulic fluid, gasoline, and diesel fuel were observed in a closet adjacent to the northern exterior of the building. Two 100-gallon containers of new and waste antifreeze were also located adjacent to the building. In addition, a 1,500-gallon waste oil UST was observed adjacent to the southern side of the building.

Buildings A and Building C were primarily used for office and administration purposes and storing construction materials. Hazardous materials located within Building C included up to 300 gallons of solvents and oil, 50 gallons of lubrication grease, and 2,000 cubic-feet of compressed gases. No evidence of significant leaks or spills was observed in these storage areas.

Numerous stockpiles of materials including wood pallets, wire cable, plastic and metal tubing, and high-voltage electrical vaults were observed along the northwest property boundary. In addition, material bins, containing sand, soil, base rock, compost, and construction debris were observed along the western property boundary.

Approximately seven hazardous materials storage areas were located in the northern portion of the site. The storage areas were secondarily contained by concrete lined trench drains and concrete berms, and hazardous materials were located within locked hazardous materials storage closets and containers, or separated by fencing and other secondary containment systems. Materials being stored in these areas consisted of up to approximately 1,000 gallons of various kinds of paint, 100 gallons of asphalt emulsion, combustible or flammable fluids, and decommissioned transformers that formerly contained oil with PCBs in excess of 5 ppm.

The transformer storage area also was observed at the northern portion of the site. The storage area consisted of an approximately 5,000-square-foot concrete pad. The pad was gently sloped to the southwest leading to a subsurface trench drain. A subsurface oil/water separator was located adjacent to the northwest of the pad area, to which the trench drain led. The separator is reportedly cleaned approximately once per month by on-site personnel.

A fuel tank storage area was located in the northwest portion of the site. The storage area consisted of a concrete pad located approximately 3 feet below the surrounding grade bordered by concrete retaining walls. Three aboveground storage tanks (ASTs) and one partial underground storage tank (half above ground and half below ground) were located within the pad area (see Soil and Ground Water Quality Evaluation Report, Lowney Associates 2001). A sump was located in the northern edge of the pad area, and appeared to pump to the adjacent vehicle wash station.

Lowney Associates has no information on any soil and ground water investigations in the immediate site vicinity.

Due to the planned excavation of soil located adjacent to the facility boundaries during construction of the proposed bypass channel, we recommended soil and ground water samples be collected for laboratory analysis. On January 31, 2000 on behalf of Schaaf & Wheeler and the SCVWD, Lowney Associates directed a subsurface exploration program and logged two borings (EB-1 and EB-2) to approximate depths of 8 to 12 feet adjacent to the tank storage area and directly adjacent to the proposed channel alignment (Figure 2). Two additional borings, EB-3 and EB-4, were drilled adjacent to the transformer storage area, near the proposed bypass channel alignment. Ground water was encountered at approximate depths of 6 to 7½ feet in two of the borings (EB-2 and EB-4); ground water was not encountered in borings EB-1 and EB-3 to the maximum depth explored of 12 feet.

Laboratory analysis of the two soil samples collected on January 31, 2000 near the tank storage area indicated low levels of diesel- and gasoline-range petroleum hydrocarbons (less than 100 parts per million [ppm]). Significant levels of diesel- and gasoline-range hydrocarbons (380,000 and 67,000 parts per billion [ppb], respectively) were detected in the ground water sample collected in this area. Laboratory analysis of soil and ground water samples collected near the transformer area indicated that no further work appeared required in this area. Based on these analytical results, we recommended that additional samples be collected to further evaluate the extent of impacted soil and ground water along the proposed bypass alignment near the tank complex.

1.3 Interviews

During our recent study, we contacted Dennis Shimozono, Fleet Services Coordinator for general information regarding past and current usage of the above-ground and partial underground storage tanks. Mr. Shimozono has been working with the Equipment Management Division since June 4, 1984 and is responsible for managing the filling of the tanks. Four 550-gallon ASTs (two diesel tanks, one solvent tank, and one thinner tank) and one 1,000-gallon diesel AST were formerly present at the tank farm. The solvent tank has been off-line for approximately 15 years. The solvent was reportedly used for general cleaning purposes throughout the yard. Mr. Shimozono reportedly never ordered solvent while working at the PAMSC. The thinner tank was reportedly empty when Mr. Shimozono first started in 1984.

John Costa, Public Works Supervisor, was also contacted to obtain additional information regarding the history of the tank farm. Mr. Costa has been working with the City for 35 years. He reported the thinner was likely used for cleaning paint equipment and thinning out paints. The solvent was likely used for cleaning the tar and asphalt equipment. The Utilities Department also may have used the solvent in the repair shop for water meters.

Keith Lahaic, Fleet Manager was also contacted Mr. Lahaic has been working with the Equipment Maintenance Division for 11 years. He reported that the solvent may have contained mineral spirits and was likely used for equipment maintenance. The thinner was likely used in the Streets Department for signing and for general infrastructure activities. The thinner tank was used up to about 11 years ago when it was removed; and the solvent tank was removed several years before that. The 500-gallon partial underground tank reportedly is a vapor recovery tank for the 10,000-gallon unleaded fuel tank. The holding tank reportedly passed a pressure test that was conducted approximately two years ago as required by the Fire Department. He reported that an overfill protection system was installed on the 10,000-gallon unleaded AST approximately two years ago; prior to this installation, the holding tank could have contained fuel product if the 10,000-gallon AST was ever overfilled.

1.4 Scope of Work

The scope of work for this evaluation was outlined in our agreement dated April 14, 2000 and included the following tasks.

- ▼ Drilling and logging six exploratory borings (EB-10 through EB-15) in the area northwest of the diesel and gasoline storage tank area of the PAMSC.
- ▼ Collecting selected soil and ground water samples for laboratory analysis.

Also included in this report are the results of the work outlined in our agreement with the City of Palo Alto Public Works Department for the PAMSC dated August 11, 2000. This separate contract was performed concurrently and included the following tasks:

- ▼ Drilling and logging five exploratory borings (EB-5 through EB-9) in the area adjacent to the diesel and gasoline storage tanks and fuel dispensing island of the PAMSC.
- ▼ Collecting selected soil and ground water samples for laboratory analysis.

2.0 SOIL AND GROUND WATER QUALITY EVALUATION

2.1 Subsurface Investigation

On May 31, 2001 and under the supervision of Principal Engineer Stason Foster, P.E., engineer James Kiernan directed a subsurface exploration program and logged two borings (EB-10 and EB-11) to approximate depths of 9 to 12 feet drilled northwest of the tank storage area on top of the raised levee. Borings EB-5 through EB-9 were drilled adjacent to each of the three dispensers and fuel pipe trenches. Ground water was encountered at approximate depths of 15 to 16 feet.

On June 28, 2001, environmental engineers James Kiernan and Kurt Soenen completed the subsurface exploration program. Borings EB-12 through EB-15 in the vicinity of the proposed bypass channel were drilled and logged to approximate depths of 8 to 10 feet where the borings encountered ground water. The boring locations are presented in Figures 2 and 3. Soil and ground water sampling protocols and boring logs for locations EB-12 through EB-15 are presented in Appendix A.

The exploratory boring elevations were not surveyed. The ground elevations at the boring locations were estimated from the topographic map of the Palo Alto tidal basin completed by Towill Inc. (1999). Elevations on that map are referenced to the 1929 National Geodetic Vertical Datum (NGVD). Measured depths to water were converted to approximate ground water elevations from these estimated ground elevations. The approximate ground water elevations at the site varied from approximately -6.5 to -11 feet below mean sea level. Approximate ground water elevations in each boring are shown on Figures 3.

2.2 Soil Sample Collection and Analyses

One soil sample collected from each of the 11 borings (6 in the Matadero Creek channel area and 5 at the PAMSC) was analyzed for diesel- and gasoline-range petroleum hydrocarbons (TPH-d, TPH-g), benzene, toluene, ethyl benzene, and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) using EPA Test Method 8015M/8020. A standard silica gel cleanup technique was used for TPH-d for soil samples collected from the six borings in the Matadero Creek channel area (EB-10 through EB-15). These analyses were selected to help evaluate if soil in the area of the fuel tanks and in the Matadero Creek channel area had been impacted by petroleum fuels. The soil samples selected for analysis from each boring were collected from the area immediately above the water table elevation.

To provide additional information and aid in evaluating health risks at a later date at the PAMSC, three soil samples (EB-5, EB-7, and EB-8) in the vicinity of the fuel island were analyzed for polyaromatic hydrocarbons (PAHs) by EPA Test Method 8310; three additional soil samples (EB-6, EB-8, and EB-9) were analyzed for porosity and fractional organic carbon (FOC).

Analytical results are presented in Tables 1 and 2. The distribution of BTEX, MTBE, TPH-d, and TPH-g in soil in the vicinity of the proposed bypass channel is shown in Figure 2. Copies of the analytical reports and chain of custody documentation are presented in Appendix B.

Table 1. Analytical Results of Selected Soil Samples
(concentrations in parts per million)

Boring Number	Depth (feet)	Mean Elev.[2]	TPHd	TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
EB-5	9½-10	-2.5	25	230	1.2	<0.10	4.2	5.7	<1.0
EB-6	9½-10	-2.5	111	140	0.051	<0.050	0.98	1.3	<0.50
EB-7	9½-10	-2.5	847	820	0.53	15	1.8	8.0	<5.0
EB-8	9½-10	-2.5	320	910	3.4	18	12	60	<5.0
EB-9	10½-11	-3.5	18.4	310	0.78	0.45	1.6	3.2	<1.2
EB-10	9½-10	-4.5	219	840	2.5	2.8	9.0	31	<5.0
EB-11	11½-12	-6.5	<1.0	<1.0	0.0061	0.019	0.0053	0.018	<0.050
EB-12	7½-8	-6.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.050
EB-13	7-7½	-6	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.050
EB-14	7-7½	-6	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.050
EB-15	7½-8	-6.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.050
Industrial PRG[1]		---	NE	NE	1.5	520	230	210	37

< Indicates that the compound was not detected at or above the stated laboratory reporting limit

[1] Preliminary Remediation Goal–EPA Region 9, 2000

[2] Mean elevations obtained from Figures 2 and 3 as discussed in Section 2.1

NE Not established

Table 2. Analytical Results of Selected Soil Samples

(concentrations in parts per million)

Boring Number	Depth (feet)	Mean Elevation[2]	Fractional Organic Carbon (%)	Porosity (%)	Naphthalene	Fluorene	Phenanthrene
EB-5	9½-10	-2.5	NA	NA	1.03	<0.02	<0.01
EB-6	4½-5	-2.5	1.132	42.14	NA	NA	NA
EB-7	9½-10	-2.5	NA	NA	0.577	0.162	0.382
EB-8	9½-10	-2.5	0.226	45.53	2.360	<0.02	<0.01
EB-9	10½-11	-3.5	0.563	56.26	NA	NA	NA
Industrial PRG[1]		---	---	---	NE	NE	NE

< Indicates that the compound was not detected at or above the stated laboratory reporting limit

[1] Preliminary Remediation Goal–EPA Region 9, 2000

[2] Mean elevations obtained from Figures 2 and 3

NE Not established

NA Not analyzed

ND Not detected

The preliminary remediation goals (PRGs) presented in Table 1 are risk-based concentrations developed by EPA Region 9; PRGs are for use as screening levels in determining if further evaluation is warranted, in prioritizing areas of concern, in establishing initial cleanup goals, and in estimating the potential health risks.

2.3 Ground Water Sample Collection and Analyses

To evaluate ground water quality at the site, ground water grab samples were collected from the 11 borings. A discussion of sampling protocol is included in Appendix A.

One ground water sample collected from each of the 11 borings was analyzed for TPH-d, TPH-g, BTEX, and MTBE using EPA Test Method 8015M/8020. Two selected ground water samples (from EB-5 and EB-9) were additionally analyzed for fuel oxygenates by EPA Test Method 8260B.

To provide additional information and aid in evaluating health risks at a later date at the PAMSC, three ground water samples (EB-5, EB-7, and EB-10) in the vicinity of the fuel island were analyzed for PAHs by EPA Test Method 8310.

Analytical results are shown in Table 3. The distribution of BTEX, MTBE, TPH-d, and TPH-g in ground water in the vicinity of the proposed bypass channel is shown on Figure 3. Copies of the laboratory reports are attached in Appendix B.

Table 3. Analytical Results of Selected Ground Water Samples
(concentrations in parts per billion)

Sample Name	Depth to Water	Mean Elev[2]	Sample Date	TPHd	TPHg	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Naphthalene
EB-5	16	-9	5/31/01	5,690	31,000	1,100	<100	1,200	3,700	<33	256
EB-6	16	-9	5/31/01	2,490	11,000	130	100	460	950	<250	NA
EB-7	16	-9	5/31/01	12,00	6,000	310	150	210	870	<250	334
EB-8	15	-8	5/31/01	10,30	210,00	7,900	17,000	2,600	12,000	<5,000	NA
EB-9	16	-9	5/31/01	1,030	31,000	970	1,700	480	2,300	140	NA
EB-10	16	-11	5/31/01	464	2,700	65	45	74	190	<50	20.2
EB-11	16	-11	5/31/01	63.9	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA
EB-12	8	-7	6/28/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA
EB-13	7.5	-6.5	6/28/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA
EB-14	8.5	-7.5	6/28/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA
EB-15	9	-8	6/28/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA
MCL[1]	---	---	---	NE	NE	1.0	150	700	1,750	13	NE

< Indicates that the compound was not detected at or above the stated laboratory reporting limit

[1] Drinking water Maximum Contaminant Levels–California DHS, January 31, 2001

[2] Mean elevations obtained from Figures 2 and 3 as discussed in Section 2.1

NE Not established

NA Not analyzed

3.0 CONCLUSIONS AND RECOMMENDATIONS

We understand the proposed bypass channel will be approximately 60 feet wide and that the southeastern boundary of the channel will be approximately 7 feet from the PAMSC fence line. Based on analytical results, petroleum hydrocarbons were detected in soil and ground water within the proposed bypass channel area. Diesel- and gasoline- range petroleum hydrocarbons were detected at 2,700 ppb and 464 ppb in ground water at EB-10. At sampling location EB-11, diesel-range petroleum hydrocarbons were detected at 63.9 ppb in the ground water. In soil from these borings, TPH-g and TPH-d were detected at up to 840 and 219 ppm, respectively. Lower levels of BTEX compounds also were detected. The extent of the impacted soil and ground water in the vicinity of the proposed bypass channel has been relatively well characterized. However, the extent of impact on PAMSC property has not been fully evaluated; to do so would require additional work.

Soil and ground water impacted by petroleum hydrocarbons may be encountered (in the vicinity of the proposed channel alignment) within approximately 75 feet of the storage tank area of the PAMSC. Prior to beginning work in this area, we recommend that the contractor prepare a Health and Safety Plan. We anticipate that ground water may be encountered during excavation of the bypass channel and that dewatering may be needed during construction. We understand that the bypass construction will involve excavation to an elevation of approximately –4 feet below msl, with a finished invert elevation at approximately –0.5 ft msl. Although encountered at a greater depth during our recent work, ground water was encountered at an approximate elevation of –0.5 ft msl during our prior work in January of 2000.

Ground water that is extracted from within approximately 75 feet of the tank complex should be assumed to be impacted and appropriately disposed. The amount of ground water generated, if any, will be dependent on the time of construction due to fluctuations in ground water elevations. We suggest contacting a dewatering contractor to obtain an estimate of the ground water volume to be dewatered during construction activities. As we discussed, the installation of ground water wells to monitor changes in ground water elevations prior to construction would be helpful. The wells also will help to further characterize the extent and stability of the ground water plume.

Since ground water near the tank complex appears to be impacted, steps should be taken, such as the use of interlocking sheet piles, to reduce the quantity of ground water to be removed from this area. During construction dewatering, some migration of contaminated ground water towards the District property would be expected; however, the migration would not be expected to be significant and would not likely cause a significant change in the distribution of contaminant concentrations due to the anticipated short duration of construction activities in this area.

Depending on the water quantity, disposal options may include discharge to the sanitary sewer system (if approved), off-site disposal at a treatment/recycling facility, or on-site treatment and subsequent discharge to Matadero Creek under a NPDES permit. The data collected from the grab ground water samples would be expected to be representative of the quality of water extracted for disposal from the excavation. Grab samples and ground water from construction dewatering both typically contain relatively high sediment levels that can result in higher detected contaminant levels compared to samples from monitoring wells (contaminants often adsorb onto sediment particles). The data collected should be adequate to evaluate disposal and/or discharge permitting requirements. The collection of additional samples from the water to be discharged or disposed will likely be required during construction activities.

Based on the data obtained, approximately 5,000 cubic yards of potentially impacted soil may be excavated to construct the bypass channel adjacent to the PAMSC tank farm. Soil excavated from this area should be stockpiled on and covered by visqueen. Samples should then be collected from the stockpile to appropriately characterize the soil quality for disposal per the requirements of the selected landfill. We would anticipate that some of this soil may be clean and acceptable for reuse. Other soil (specifically that excavated from near or below the ground water table) may require landfill disposal. Based on the data collected, it appears that the soil would be acceptable for disposal at a local Class III landfill. Costs for transportation and disposal at a Class III landfill are typically on the order of $50 per cubic yard ($35 per ton). Costs for transportation and disposal at a Class II landfill (if needed) are typically an additional $10 per cubic yard. If petroleum hydrocarbon concentrations in the stockpile are low, it may be possible to obtain approval from the overseeing regulatory agency to reuse the soil on-site. Earthwork activities in this area will need to be performed by appropriately trained personnel.

4.0 LIMITATIONS

This report was prepared to evaluate soil and ground water quality at the Matadero Creek Remediation Project at the time of this study. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and location. The chemical and other data presented in this report can change over time and are applicable only to the time this study was performed. We are not responsible for the data presented by others.

The accuracy and reliability of geo- or hydrochemical studies are a reflection of the number and type of samples taken and extent of the analyses conducted, and are thus inherently limited and dependent upon the resources expended. Chemical analyses were performed for specific parameters during this investigation, as detailed in the scope of services. Please note that additional constituents not analyzed for during this investigation may be present in soil and ground water at the site. Our sampling and analytical plan was designed using accepted environmental principles and our judgment for the performance of a reconnaissance soil and ground water quality investigation, and was based on the degree of investigation desired by you. It is possible to obtain a greater degree of certainty, if desired, by implementing a more rigorous soil and ground water sampling program or evaluating the risk posed by the contaminants detected, if any.

5.0 REFERENCES

Lowney Associates. 1999. *Limited Geotechnical and Hazardous Materials Evaluation*, unpublished report, dated November 24, 1999.

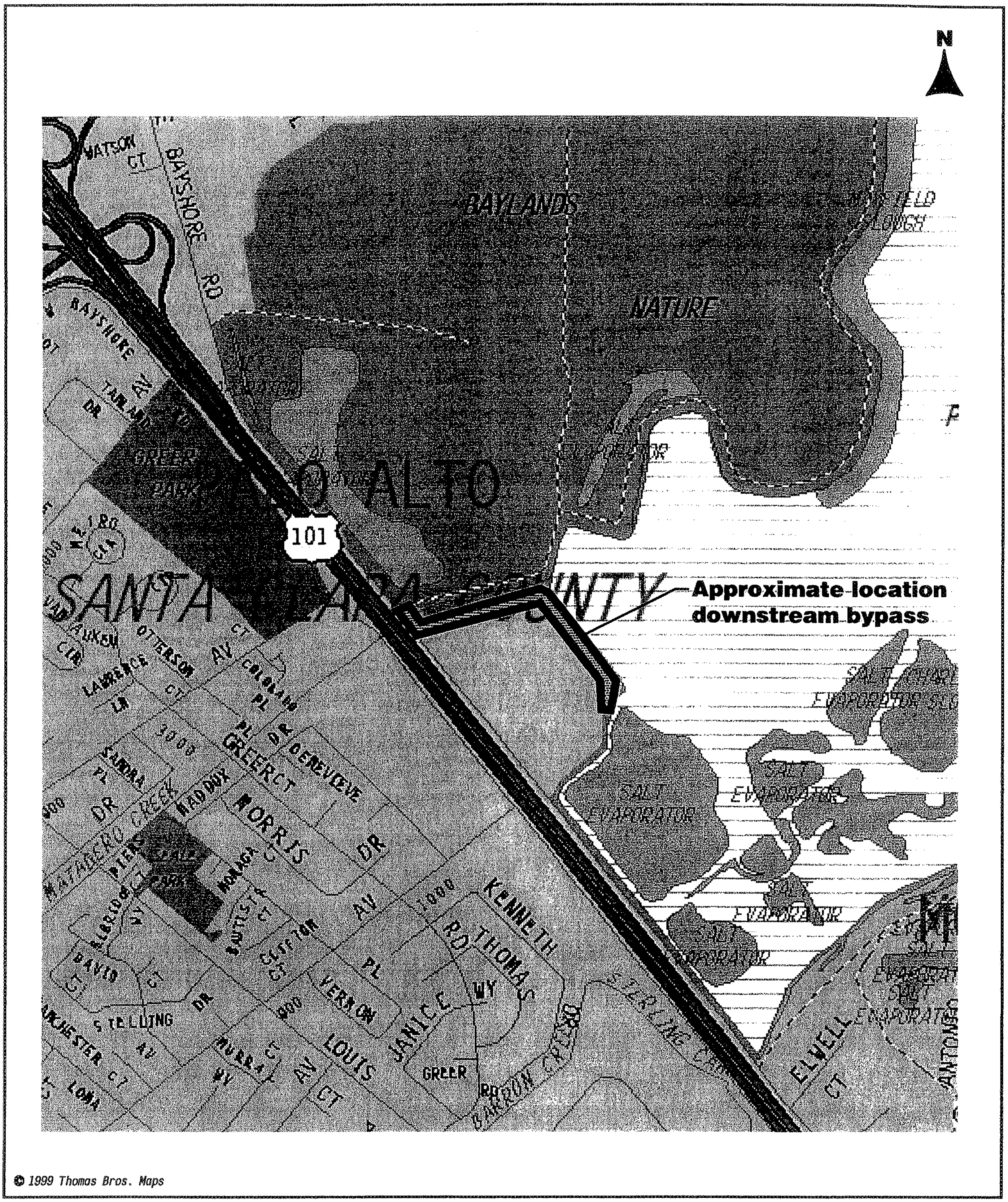
Lowney Associates. 2000. *Soil and Ground Water Quality Evaluation, Matadero Creek Remediation Project*, unpublished report, dated March 15, 2000.

Schaaf & Wheeler Consulting Civil Engineers. 1999. *Matadero/Barron Creeks Long-Term Remediation*, unpublished report, dated December 3, 1999.

Towill, Inc. 1999. *Topographic Map of Palo Alto Tidal Basin for MacKay & Somps*, unpublished map, dated April 2, 1999.

* * * * * * * * * * * * * *

Figures



Approximate location downstream bypass

© 1999 Thomas Bros. Maps

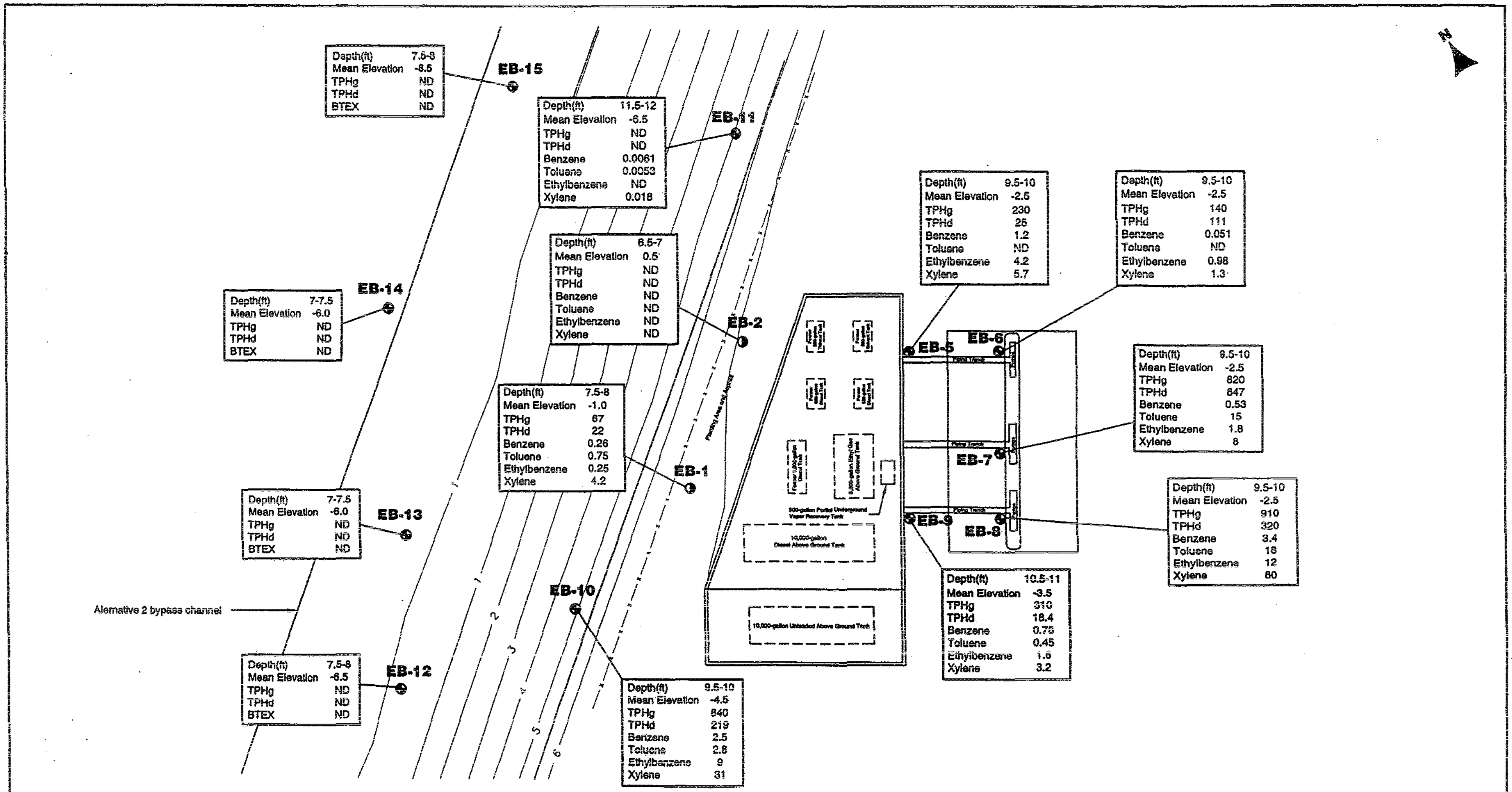
8/01*EB

VICINITY MAP

MATADERO CREEK PROPOSED DOWNSTREAM BYPASS
Palo Alto, California

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 1
1453-1G


N
EB-15
EB-11
EB-14
EB-2
EB-1
EB-13
EB-10
EB-12
EB-5
EB-6
EB-7
EB-8
EB-9
Alternative 2 bypass channel
1
1
2
3
4
5
6
Planting Area and Asphalt
Piping Trench
Piping Trench
Piping Trench
Former 1,000-gallon Diesel Tank
5,000-gallon Ethyl Gas Above Ground Tank
500-gallon Partial Underground Vapor Recovery Tank
10,000-gallon Diesel Above Ground Tank
10,000-gallon Unleaded Above Ground Tank

EB-15

Depth(ft)	7.5-8
Mean Elevation	-8.5
TPHg	ND
TPHd	ND
BTEX	ND

EB-11

Depth(ft)	11.5-12
Mean Elevation	-6.5
TPHg	ND
TPHd	ND
Benzene	0.0061
Toluene	0.0053
Ethylbenzene	ND
Xylene	0.018

EB-14

Depth(ft)	7-7.5
Mean Elevation	-6.0
TPHg	ND
TPHd	ND
BTEX	ND

EB-2

Depth(ft)	6.5-7
Mean Elevation	0.5
TPHg	ND
TPHd	ND
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene	ND

EB-1

Depth(ft)	7.5-8
Mean Elevation	-1.0
TPHg	67
TPHd	22
Benzene	0.26
Toluene	0.75
Ethylbenzene	0.25
Xylene	4.2

EB-13

Depth(ft)	7-7.5
Mean Elevation	-6.0
TPHg	ND
TPHd	ND
BTEX	ND

EB-12

Depth(ft)	7.5-8
Mean Elevation	-6.5
TPHg	ND
TPHd	ND
BTEX	ND

EB-10

Depth(ft)	9.5-10
Mean Elevation	-4.5
TPHg	840
TPHd	219
Benzene	2.5
Toluene	2.8
Ethylbenzene	9
Xylene	31

EB-5

Depth(ft)	9.5-10
Mean Elevation	-2.5
TPHg	230
TPHd	25
Benzene	1.2
Toluene	ND
Ethylbenzene	4.2
Xylene	5.7

EB-6

Depth(ft)	9.5-10
Mean Elevation	-2.5
TPHg	140
TPHd	111
Benzene	0.051
Toluene	ND
Ethylbenzene	0.98
Xylene	1.3

EB-7

Depth(ft)	9.5-10
Mean Elevation	-2.5
TPHg	820
TPHd	847
Benzene	0.53
Toluene	15
Ethylbenzene	1.8
Xylene	8

EB-8

Depth(ft)	9.5-10
Mean Elevation	-2.5
TPHg	910
TPHd	320
Benzene	3.4
Toluene	18
Ethylbenzene	12
Xylene	60

EB-9

Depth(ft)	10.5-11
Mean Elevation	-3.5
TPHg	310
TPHd	18.4
Benzene	0.78
Toluene	0.45
Ethylbenzene	1.6
Xylene	3.2

LEGEND

- ● - Approximate location of exploratory boring
- ◑ - Approximate location of previous exploratory boring
- —2— - Elevation contour (ft.)
- ND - Not detected
- Concentrations in ppm

Base by Paul James Huston Architect, dated 8/17/65 and Towill Inc., dated 4/2/99.

0 20
Scale feet

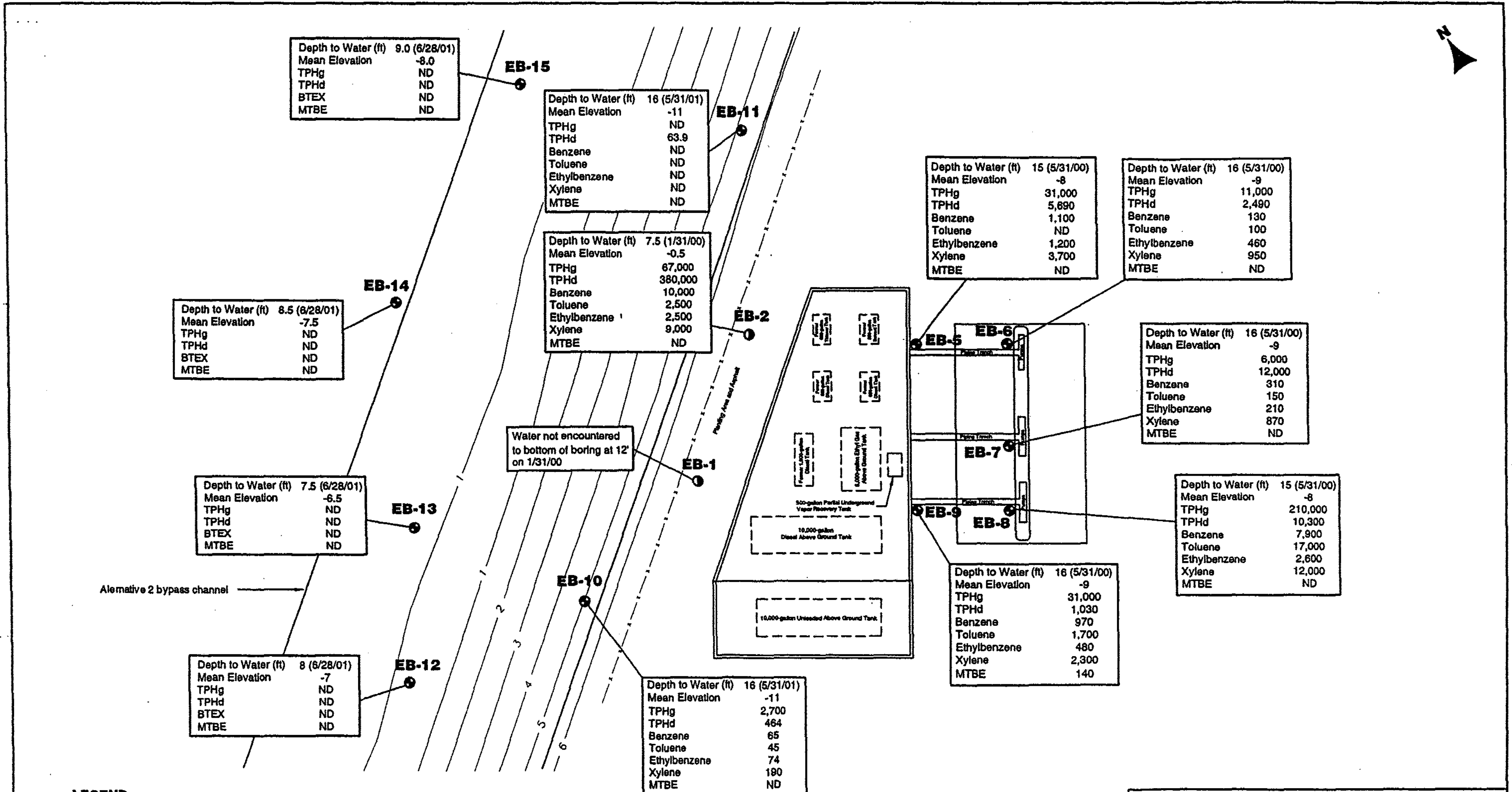
DISTRIBUTION OF BTEX, MTBE, TPHg, & TPHd IN SOIL

MATADERO CREEK REMEDIATION PROJECT
Palo Alto, California

LOWNEYASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 2
1453-1F

7/01 EB


N
Alemative 2 bypass channel
1
1
2
3
4
5
6
Planting Area and Asphalt
Piping Trench
Piping Trench
Piping Trench
Former 1,000-gallon Diesel Tank
6,000-gallon Ethyl Gas Above Ground Tank
500-gallon Partial Underground Vapor Recovery Tank
10,000-gallon Diesel Above Ground Tank
10,000-gallon Unleaded Above Ground Tank
0
20
Scale
feet

EB-15

Depth to Water (ft)	9.0 (6/28/01)
Mean Elevation	-8.0
TPHg	ND
TPHd	ND
BTEX	ND
MTBE	ND

EB-11

Depth to Water (ft)	16 (5/31/01)
Mean Elevation	-11
TPHg	ND
TPHd	63.9
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene	ND
MTBE	ND

EB-2

Depth to Water (ft)	7.5 (1/31/00)
Mean Elevation	-0.5
TPHg	67,000
TPHd	380,000
Benzene	10,000
Toluene	2,500
Ethylbenzene	2,500
Xylene	9,000
MTBE	ND

EB-14

Depth to Water (ft)	8.5 (6/28/01)
Mean Elevation	-7.5
TPHg	ND
TPHd	ND
BTEX	ND
MTBE	ND

EB-1

Water not encountered to bottom of boring at 12' on 1/31/00

EB-13

Depth to Water (ft)	7.5 (6/28/01)
Mean Elevation	-6.5
TPHg	ND
TPHd	ND
BTEX	ND
MTBE	ND

EB-12

Depth to Water (ft)	8 (6/28/01)
Mean Elevation	-7
TPHg	ND
TPHd	ND
BTEX	ND
MTBE	ND

EB-10

Depth to Water (ft)	16 (5/31/01)
Mean Elevation	-11
TPHg	2,700
TPHd	464
Benzene	65
Toluene	45
Ethylbenzene	74
Xylene	190
MTBE	ND

EB-5

Depth to Water (ft)	15 (5/31/00)
Mean Elevation	-8
TPHg	31,000
TPHd	5,690
Benzene	1,100
Toluene	ND
Ethylbenzene	1,200
Xylene	3,700
MTBE	ND

EB-6

Depth to Water (ft)	16 (5/31/00)
Mean Elevation	-9
TPHg	11,000
TPHd	2,490
Benzene	130
Toluene	100
Ethylbenzene	460
Xylene	950
MTBE	ND

EB-7

Depth to Water (ft)	16 (5/31/00)
Mean Elevation	-9
TPHg	6,000
TPHd	12,000
Benzene	310
Toluene	150
Ethylbenzene	210
Xylene	870
MTBE	ND

EB-8

Depth to Water (ft)	15 (5/31/00)
Mean Elevation	-8
TPHg	210,000
TPHd	10,300
Benzene	7,900
Toluene	17,000
Ethylbenzene	2,600
Xylene	12,000
MTBE	ND

EB-9

Depth to Water (ft)	16 (5/31/00)
Mean Elevation	-9
TPHg	31,000
TPHd	1,030
Benzene	970
Toluene	1,700
Ethylbenzene	480
Xylene	2,300
MTBE	140

LEGEND

◐ - Approximate location of exploratory boring

◑ - Approximate location of previous exploratory boring

—2— - Elevation contour (ft.)

ND - Not detected

Concentrations in ppb

Base by Paul James Huston Architect, dated 8/17/85 and Towill Inc., dated 4/2/99.

DISTRIBUTION OF BTEX, MTBE, TPHg, & TPHd IN GROUND WATER

MATADERO CREEK REMEDIATION PROJECT
Palo Alto, California

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Environmental/Geotechnical/Engineering Services

FIGURE 3
1453-1F

7/01*EB

Appendix A

APPENDIX A

SOIL AND GROUND WATER SAMPLING PROTOCOL AND BORINGS LOGS

Drilling: The subsurface investigation was performed on May 31 and June 28, 2001. Borings EB-5 through EB-9 were drilled using a truck-mounted drill rig equipped with Direct Punch Technology equipment. The borings were advanced by hydraulically driving a 2-inch-diameter outer casing with an inner sampler, which contains a clear acetate sample liner. As the tools are advanced, the soil sample will be collected within the inner sampler. The new sampler then will be lowered into place and the tools advanced further to collect the next soil sample. The remaining borings were advanced using hand sampling equipment. After completion, the borings were backfilled to the surface with cement grout.

Soil Sampling: Soil samples for laboratory analysis were collected in brass liners. The ends of the liners were covered in Teflon film, fitted with plastic end caps, taped, and labeled with a unique identification number. The samples were then placed in an ice-chilled cooler, and transported to a state-certified analytical laboratory with chain of custody documentation.

Ground Water Sampling: After the borings were advanced to the desired depths, ground water was collected using a small diameter bailer and placed in appropriate sample bottles labeled with a unique identification number. The samples then were placed in an ice-chilled cooler and transported to a state-certified analytical laboratory with chain of custody documentation.

Equipment Decontamination: All drilling and sampling equipment was cleaned in a solution of laboratory grade detergent and distilled water before use at each sampling point.

EXPLORATORY BORING: EB-12

Sheet 1 of 1

DRILL RIG: Hand Auger	PROJECT NO: 1453-1F
BORING TYPE:	PROJECT: MATADERO CREEK REMEDIATION PROJECT
LOGGED BY: KMS	LOCATION: PALO ALTO, CA
START DATE: 6-28-01 FINISH DATE: 6-28-01	COMPLETION DEPTH: 9.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

Undrained Shear Strength (ksf)
- ○ Pocket Penetrometer
- △ Torvane
- ● Unconfined Compression
- ▲ U-U Triaxial Compression

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS SURFACE ELEVATION:	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf) 1.0 2.0 3.0 4.0
	0		**TOP SOIL** dark brown, dry, no odor	PT						
		▨	**SILTY CLAY (CL)** dry to moist, brown, no odor	CL						
		▨	**SILTY CLAY (CL)** soft to firm, gray brown, slightly moist, some sand present, scattered gravels, subangular to rounded to 1/8 inch,	CL						
	5	▨	**SILTY CLAY (CL)** soft, moist, gray green, with some sand, light gray mottling	CL						
▽			**CLAYEY GRAVEL (GC)** wet, light gray with some sand, gravels up to 1 inch	GC		☒				
	10		Bottom of Boring at 9 feet							
	15									
	20									
	25									

GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 8.0 FEET

LA CORP.GDT 7/30/01 MV

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EXPLORATORY BORING: EB-13

Sheet 1 of 1

DRILL RIG: Hand Auger
BORING TYPE:
LOGGED BY: KMS
START DATE: 6-28-01 FINISH DATE: 6-28-01

PROJECT NO: 1453-1F
PROJECT: MATADERO CREEK REMEDIATION PROJECT
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 9.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

Undrained Shear Strength (ksf)
○ Pocket Penetrometer
△ Torvane
● Unconfined Compression
▲ U-U Triaxial Compression

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS SURFACE ELEVATION:	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf) 1.0 2.0 3.0 4.0
	0	**TOPSOIL** dry, dark brown, organic, no odor	PT						
		SANDY SILT (ML) dry, light brown	ML						
		SANDY SILT (ML) dry, light brown, contact with gray black silty clay	ML						
	5	**SILTY CLAY (CL)** dry to moist, dark gray-black, with yellow-brown mottling, scattered gravels to 1/16 inch, subrounded to angular	CL						
		SANDY CLAY (CL) soft, moist, light brown and gray, organics (roots)	CL						
▽		**SILTY CLAY (CL)** soft, moist, light brown with gray fragments, with some sand	CL		☒				
		GRAVELLY CLAY (CL) stiff, damp, light brown/gray, some silt	CL						
	10	**CLAYEY GRAVEL (GC)** wet, light gray, gravels up to 1 inch, subangular, some sand present Bottom of Boring at 9 feet	GC						
	15								
	20								
	25								

GROUND WATER OBSERVATIONS:
▽: FREE GROUND WATER MEASURED DURING DRILLING AT 7.5 FEET

LA CORP.GDT 7/30/01 MV*

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Environmental/Geotechnical/Engineering Services

EXPLORATORY BORING: EB-14

Sheet 1 of 1

DRILL RIG: Hand Auger	PROJECT NO: 1453-1F
BORING TYPE:	PROJECT: MATADERO CREEK REMEDIATION PROJECT
LOGGED BY: KMS	LOCATION: PALO ALTO, CA
START DATE: 6-28-01 FINISH DATE: 6-28-01	COMPLETION DEPTH: 9.5 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

Undrained Shear Strength (ksf)

○ Pocket Penetrometer

△ Torvane

● Unconfined Compression

▲ U-U Triaxial Compression

1.0 2.0 3.0 4.0

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS SURFACE ELEVATION:	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
	0		**TOPSOIL** dark brown, organics	PT					
			SANDY SILT (ML) dry, light brown	ML					
	5		**SILTY CLAY (CL)** medium stiff, moist, dark/light with mottling, trace gravels up to 1/8 inch	CL					
▽			**SANDY CLAY (CL)** soft, moist, light gray, with some organics (roots)	CL		☒			
			CLAYEY GRAVEL (GC) wet, light gray, with some sand, gravels up to 1 inch, subangular	GC					
	10		Bottom of Boring at 9½ feet						
	15								
	20								
	25								

GROUND WATER OBSERVATIONS:

▽: FREE GROUND WATER MEASURED DURING DRILLING AT 8.5 FEET

LA CORP.GDT 7/30/01 MV

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Environmental/Geotechnical/Engineering Services

EXPLORATORY BORING: EB-15

Sheet 1 of 1

DRILL RIG: Hand Auger
BORING TYPE:
LOGGED BY: KMS
START DATE: 6-28-01 FINISH DATE: 6-28-01
PROJECT NO: 1453-1F
PROJECT: MATADERO CREEK REMEDIATION PROJECT
LOCATION: PALO ALTO, CA
COMPLETION DEPTH: 9.5 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

Undrained Shear Strength (ksf)
○ Pocket Penetrometer
△ Torvane
● Unconfined Compression
▲ U-U Triaxial Compression
1.0 2.0 3.0 4.0

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS SURFACE ELEVATION:	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE	Undrained Shear Strength (ksf)
	0		**TOPSOIL** dry, dark brown, organic, no odor	PT						
			SANDY SILT (ML) dry, light brown, with some clay	ML						
			SILTY CLAY (CL) stiff, moist, dark gray-brown with yellow-brown mottling	CL						
	5		**SILTY CLAY (CL)** soft, moist, light gray-brown, with some sand	CL						
			SILTY CLAY (CL) firm, moist, green-gray with gray mottling, some sand more moist, soft more moist, soft and more sand, gravels	CL		☒				
∇			**CLAYEY GRAVEL (GC)** wet, light gray, gravels up to 1 inch, subangular, some sand	GC						
	10		Bottom of Boring at 9½ feet							
	15									
	20									
	25									

GROUND WATER OBSERVATIONS:
∇: FREE GROUND WATER MEASURED DURING DRILLING AT 9.0 FEET

LA_CORP.GDT 7/30/01 MV

LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

Appendix B

APPENDIX B

ANALYTICAL RESULTS

The chilled samples were delivered to a state-certified analytical laboratory. Chain of custody documentation was maintained for all samples. Attached are copies of the analytical results and the chain of custody forms.

Sequoia
Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

June 14, 2001

Stason Foster
Lowney Associates
405 Clyde Ave.
Mountain View, CA 94043

RE: Sequoia Analytical #106002

Dear Mr. Stason Foster:

Enclosed you will find results for your samples received by the laboratory on June 1, 2001 for your Palo Alto Municipal Services Center project. The porosity and fractional organic carbon (FOC) tests your requested were subcontracted to and analyzed by Environmental Technical Services (ETS) located in Petaluma, California. The following is a sample identification summary:

Lowney Assoc. Sample ID	Sequoia Analytical Sample ID	ETS Sample ID
EB-6 @ 4 ½-5	L106002-06	01-05-0343
EB-8 @ 9 1/2-10	L106002-15	01-05-0344
EB-9 @ 10 ½-11	L106002-19	01-05-0345

If you have any questions, comments or concerns, please do not hesitate to contact me either by e-mail at lpelt@sequoialabs.com or by phone at (650) 232-9600.

I look forward to maintaining a growing working relationship with you.

Sincerely,

Latonya K. Pelt

Latonya K. Pelt
Project Manager

E T S

1343 Redwood Way
Petaluma, CA 94954
(707) 795-9605/FAX 795-9384

Environmental Technical Services

Soil, Water, Air, Plant Tissue and Other Testing & Monitoring Analytical Labs Technical Support

Serving people and the environment so that both benefit.

CLIENT:	Sequoia Analytical, 1551 Industriaql Blvd., San Carlos, CA 94070			ANALYST(S)	SUPERVISOR
ATTN:	Latonya, Pelt	DATE COLLECTED	DATE RECEIVED	S. Banwait W. Zuo	D. Jacobson
JOB NUMBER:	L106002		DATE of COMPLETION		LAB DIRECTOR
ITE LOCATION:	PAMF, Pasadena, California	5/31/01	6/4/01	6/13/01	G. Conrad PhD

LAB SAMPLE NUMBER	SAMPLE ID	BORING or DEPTH of SAMPLE	F O C ORG CARB %	MOISTURE CONTENT %	DRY BULK DENSITY lbs/cuft	SPECIFIC GRAVITY gm/cc	POROSITY (Volume) %	CAPILLARY MOISTURE %
01-05-0343	106002-06	4.5-5'	1.132	27.91	94.7	2.62	42.14	-
01-05-0344	106002-15	9.5-10'	0.226	25.21	90.4	2.65	45.53	-
01-05-0345	106002-19	10.5-11'	0.563	25.72	73.5	2.69	56.26	-

LAB SAMPLE NUMBER	SAMPLE ID	AREA/TYPE of SAMPLE	SAND EQUIVALENT %	FINES TOTAL %	RATE of INFILTRATION cm/sec	TENSIOMETRY kPa	SOLUTE DIFFUSIVITY sqcm/sec	HYDRAULIC CONDUCTIVITY cm/sec

COMMENTS

These are high to very high porosities with the first two not too unusual for clayey materials. However, the third sample (-19) is unusual in its porosity. Its very high porosity is because of its low density coupled with its very normal specific gravity. It must be noted that while the first two samples (-06 & -15) appeared to be fairly well in tact in their core tubes, the last sample (-19) was loose and may have been disturbed. In fact, it was difficult to obtain an in tact core section for density/sp.gr. measurements as the material was crumbly and soft. Therefore, the determinations for this sample may be approximations. Nevertheless, the analyst reports that this soil was lighter than usual and much more sandy than the other two samples. The FOCs are moderate (-15 & -19) to moderately high (-06) suggesting significant organics incorporated with them on burial.

\\ NOTES: Samples are prepared according to appropriate methods as required, requested, and/or found in one of the following references: American Society for Testing and Materials (ASTM), and/or Methods of Soil Analysis (ASA/SSSA), ç 1986, 2nd ed., or other appropriate and/or acceptable methodologies (eg. USGS, EPA, USDA, etc.): density - ASTM D 2937; specific Gravity - ASTM D 854; Capillary Moisture - ASTM D 3152/D 2325; Hydraulic Conductivity - ASTM D 5084; Sand Equivalent - ASTM D 2419; Fines Total - ASTM D 422; fluid penetration measures - Methods of Soil Analysis

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

June 12 , 2001

Stason Foster
Lowney Associates
405 Clyde Ave
Mountain View, CA 94043
RE: - / L106002

Enclosed are the results of analyses for samples received by the laboratory on 06/01/01. If you have any questions concerning this report, please feel free o contact me.

Sincerely,

Latonya K. Pelt

Latonya Pelt
Project Manager

CA ELAP Certificate Number 2360

Lowney Associates 405 Clyde Ave Mountain View CA, 94043	Project: - Project Number: Palo Alto Municipal Services Center Project Manager: Stason Foster	Reported: 06/12/01 11:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EB-5@7-7 1/2	L106002-01	Soil	05/31/01 00:00	06/01/01 11:00
EB-5@9 1/2-10	L106002-02	Soil	05/31/01 00:00	06/01/01 11:00
EB-5@11 1/2-12	L106002-03	Soil	05/31/01 00:00	06/01/01 11:00
EB-5@13 1/2-14	L106002-04	Soil	05/31/01 00:00	06/01/01 11:00
EB-5	L106002-05	Water	05/31/01 00:00	06/01/01 11:00
EB-6@4 1/2-5	L106002-06	Soil	05/31/01 00:00	06/01/01 11:00
EB-6@9 1/2-10	L106002-07	Soil	05/31/01 00:00	06/01/01 11:00
EB-6@14 1/2-15	L106002-08	Soil	05/31/01 00:00	06/01/01 11:00
EB-6	L106002-09	Water	05/31/01 00:00	06/01/01 11:00
EB-7@4 1/2-5	L106002-10	Soil	05/31/01 00:00	06/01/01 11:00
EB-7@9 1/2-10	L106002-11	Soil	05/31/01 00:00	06/01/01 11:00
EB-7@14 1/2-15	L106002-12	Soil	05/31/01 00:00	06/01/01 11:00
EB-7	L106002-13	Water	05/31/01 00:00	06/01/01 11:00
EB-8@4 1/2-5	L106002-14	Soil	05/31/01 00:00	06/01/01 11:00
EB-8@9 1/2-10	L106002-15	Soil	05/31/01 00:00	06/01/01 11:00
EB-8@14 1/2-15	L106002-16	Soil	05/31/01 00:00	06/01/01 11:00
EB-8	L106002-17	Water	05/31/01 00:00	06/01/01 11:00
EB-9@4 1/2-5	L106002-18	Soil	05/31/01 00:00	06/01/01 11:00
EB-9@10 1/2-11	L106002-19	Soil	05/31/01 00:00	06/01/01 11:00
EB-9@14 1/2-15	L106002-20	Soil	05/31/01 00:00	06/01/01 11:00
EB-9	L106002-21	Water	05/31/01 00:00	06/01/01 11:00
EB-10@5 1/2-6	L106002-22	Soil	05/31/01 00:00	06/01/01 11:00
EB-10@9 1/2-10	L106002-23	Soil	05/31/01 00:00	06/01/01 11:00
EB-10@14 1/2-15	L106002-24	Soil	05/31/01 00:00	06/01/01 11:00
EB-10	L106002-25	Water	05/31/01 00:00	06/01/01 11:00
EB-11@5 1/2-6	L106002-26	Soil	05/31/01 00:00	06/01/01 11:00
EB-11@11 1/2-12	L106002-27	Soil	05/31/01 00:00	06/01/01 11:00
EB-11@14 1/2-15	L106002-28	Soil	05/31/01 00:00	06/01/01 11:00
EB-11	L106002-29	Water	05/31/01 00:00	06/01/01 11:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-5@9 1/2-10 (L106002-02) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	230	20	mg/kg	20	1060018	06/05/01	06/06/01	DHS LUFT	P-02
Benzene	1.2	0.10	"	"	"	"	"	"	
Toluene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	4.2	0.10	"	"	"	"	"	"	
Xylenes (total)	5.7	0.10	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*5.65 %*	*60-140*		*"*	*"*	*"*	*"*	*S-06*
EB-5 (L106002-05) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	31000	10000	ug/l	200	1060019	06/05/01	06/05/01	DHS LUFT	P-01
Benzene	1100	100	"	"	"	"	"	"	
Toluene	ND	100	"	"	"	"	"	"	
Ethylbenzene	1200	100	"	"	"	"	"	"	
Xylenes (total)	3700	100	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1000	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.8 %*	*70-130*		*"*	*"*	*"*	*"*	
EB-6@9 1/2-10 (L106002-07) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	140	10	mg/kg	10	1060018	06/05/01	06/06/01	DHS LUFT	P-02
Benzene	0.051	0.050	"	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	"	
Ethylbenzene	0.98	0.050	"	"	"	"	"	"	
Xylenes (total)	1.3	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*9.00 %*	*60-140*		*"*	*"*	*"*	*"*	*S-06*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-6 (L106002-09) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	11000	2500	ug/l	50	1060007	06/03/01	06/03/01	DHS LUFT	P-01
Benzene	130	25	"	"	"	"	"	"	
Toluene	100	25	"	"	"	"	"	"	
Ethylbenzene	460	25	"	"	"	"	"	"	
Xylenes (total)	950	25	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*74.8 %*	*70-130*		"	"	"	"	
EB-7@9 1/2-10 (L106002-11) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	820	100	mg/kg	100	1060018	06/05/01	06/06/01	DHS LUFT	P-02
Benzene	0.53	0.50	"	"	"	"	"	"	
Toluene	15	0.50	"	"	"	"	"	"	
Ethylbenzene	1.8	0.50	"	"	"	"	"	"	
Xylenes (total)	8.0	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*%*	*60-140*		"	"	"	"	*S-06*
EB-7 (L106002-13) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	6000	2500	ug/l	50	1060017	06/04/01	06/04/01	DHS LUFT	P-01
Benzene	310	25	"	"	"	"	"	"	
Toluene	150	25	"	"	"	"	"	"	
Ethylbenzene	210	25	"	"	"	"	"	"	
Xylenes (total)	870	25	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*95.6 %*	*70-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-8@9 1/2-10 (L106002-15) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	**910**	100	mg/kg	100	1060018	06/05/01	06/06/01	DHS LUFT	P-02
Benzene	**3.4**	0.50	"	"	"	"	"	"	
Toluene	**18**	0.50	"	"	"	"	"	"	
Ethylbenzene	**12**	0.50	"	"	"	"	"	"	
Xylenes (total)	**60**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*%*	*60-140*		*"*	*"*	*"*	*"*	*S-06*
EB-8 (L106002-17) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	**210000**	50000	ug/l	1000	1060007	06/03/01	06/03/01	DHS LUFT	P-01
Benzene	**7900**	500	"	"	"	"	"	"	
Toluene	**17000**	500	"	"	"	"	"	"	
Ethylbenzene	**2600**	500	"	"	"	"	"	"	
Xylenes (total)	**12000**	500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5000	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.9 %*	*70-130*		*"*	*"*	*"*	*"*	
EB-9@10 1/2-11 (L106002-19) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	**310**	25	mg/kg	25	1060018	06/05/01	06/07/01	DHS LUFT	P-02
Benzene	**0.78**	0.12	"	"	"	"	"	"	
Toluene	**0.45**	0.12	"	"	"	"	"	"	
Ethylbenzene	**1.6**	0.12	"	"	"	"	"	"	
Xylenes (total)	**3.2**	0.12	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.2	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*6.70 %*	*60-140*		*"*	*"*	*"*	*"*	*S-06*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lowney Associates	Project: -	
405 Clyde Ave	Project Number: Palo Alto Municipal Services Center	Reported:
Mountain View CA, 94043	Project Manager: Stason Foster	06/12/01 11:58

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

EB-9 (L106002-21) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Hydrocarbons as Gasoline	**31000**	10000	ug/l	200	1060007	06/03/01	06/03/01	DHS LUFT	P-01
Benzene	**970**	100	"	"	"	"	"	"	
Toluene	**1700**	100	"	"	"	"	"	"	
Ethylbenzene	**480**	100	"	"	"	"	"	"	
Xylenes (total)	**2300**	100	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1000	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*78.9 %*	*70-130*		"	"	"	"	

EB-10@9 1/2-10 (L106002-23) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Hydrocarbons as Gasoline	**840**	100	mg/kg	100	1060018	06/05/01	06/07/01	DHS LUFT	P-02
Benzene	**2.5**	0.50	"	"	"	"	"	"	
Toluene	**2.8**	0.50	"	"	"	"	"	"	
Ethylbenzene	**9.0**	0.50	"	"	"	"	"	"	
Xylenes (total)	**31**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*4.60 %*	*60-140*		"	"	"	"	*S-06*

EB-10 (L106002-25) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Hydrocarbons as Gasoline	**2700**	500	ug/l	10	1060007	06/03/01	06/03/01	DHS LUFT	P-01
Benzene	**65**	5.0	"	"	"	"	"	"	
Toluene	**45**	5.0	"	"	"	"	"	"	
Ethylbenzene	**74**	5.0	"	"	"	"	"	"	
Xylenes (total)	**190**	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.8 %*	*70-130*		"	"	"	"	

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-11@11 1/2-12 (L106002-27) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	ND	1.0	mg/kg	1	1060018	06/05/01	06/07/01	DHS LUFT	
Benzene	**0.0061**	0.0050	"	"	"	"	"	"	
Toluene	**0.019**	0.0050	"	"	"	"	"	"	
Ethylbenzene	**0.0053**	0.0050	"	"	"	"	"	"	
Xylenes (total)	**0.018**	0.0050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.0 %*	*60-140*		"	"	"	"	
EB-11 (L106002-29) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1060007	06/03/01	06/03/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.9 %*	*70-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Volatile Organic Oxygenated Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-5 (L106002-05) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									**O-04**
Ethanol	ND	17000	ug/l	16.67	1060009	06/02/01	06/02/01	EPA 8260B	
Tert-butyl alcohol	ND	1700	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	33	"	"	"	"	"	"	
Di-isopropyl ether	ND	33	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	33	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	33	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*111 %*	*76-114*		"	"	"	"	
EB-9 (L106002-21) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Ethanol	ND	25000	ug/l	25	1060009	06/02/01	06/02/01	EPA 8260B	
Tert-butyl alcohol	ND	2500	"	"	"	"	"	"	
Methyl tert-butyl ether	**140**	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*	*76-114*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-5@9 1/2-10 (L106002-02) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**25.5**	1.00	mg/kg	1	1F06021	06/06/01	06/08/01	DHS LUFT	
Surrogate: n-Pentacosane		*83.8 %*	*50-150*		"	"	"	"	
EB-5 (L106002-05) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**5690**	200	ug/l	4	1F06024	06/06/01	06/11/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		*108 %*	*50-150*		"	"	"	"	
EB-6@9 1/2-10 (L106002-07) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**111**	10.0	mg/kg	10	1F06021	06/06/01	06/11/01	DHS LUFT	D-17
Surrogate: n-Pentacosane		*108 %*	*50-150*		"	"	"	"	
EB-6 (L106002-09) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**2490**	50.0	ug/l	1	1F06024	06/06/01	06/08/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		*161 %*	*50-150*		"	"	"	"	*S-02*
EB-7@9 1/2-10 (L106002-11) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**847**	40.0	mg/kg	40	1F06021	06/06/01	06/11/01	DHS LUFT	D-17
Surrogate: n-Pentacosane		*222 %*	*50-150*		"	"	"	"	*S-01*
EB-7 (L106002-13) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**12000**	500	ug/l	10	1F06024	06/06/01	06/11/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		*136 %*	*50-150*		"	"	"	"	
EB-8@9 1/2-10 (L106002-15) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**320**	10.0	mg/kg	10	1F06021	06/06/01	06/11/01	DHS LUFT	D-17
Surrogate: n-Pentacosane		*132 %*	*50-150*		"	"	"	"	

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Lowney Associates
405 Clyde Ave
Mountain View CA, 94043

Project: -
Project Number: Palo Alto Municipal Services Center
Project Manager: Stason Foster

Reported:
06/12/01 11:58

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-8 (L106002-17) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**10300**	500	ug/l	10	1F06024	06/06/01	06/11/01	DHS LUFT	
Surrogate: n-Pentacosane		*112 %*	*50-150*		"	"	"	"	
EB-9@10 1/2-11 (L106002-19) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**18.4**	1.00	mg/kg	1	1F06021	06/06/01	06/09/01	DHS LUFT	D-14
Surrogate: n-Pentacosane		*71.9 %*	*50-150*		"	"	"	"	
EB-9 (L106002-21) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**1030**	50.0	ug/l	1	1F06024	06/06/01	06/08/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		*88.7 %*	*50-150*		"	"	"	"	

Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-10@9 1/2-10 (L106002-23) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**219**	10.0	mg/kg	10	1F06022	06/06/01	06/11/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		*102 %*	*40-140*		"	"	"	"	
EB-10 (L106002-25) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**464**	50.0	ug/l	1	1F07005	06/07/01	06/09/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		*79.7 %*	*40-140*		"	"	"	"	
EB-11@11 1/2-12 (L106002-27) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	ND	1.00	mg/kg	1	1F06022	06/06/01	06/11/01	DHS LUFT	
Surrogate: n-Pentacosane		*77.8 %*	*40-140*		"	"	"	"	
EB-11 (L106002-29) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Diesel Range Hydrocarbons	**63.9**	50.0	ug/l	1	1F07005	06/07/01	06/09/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		*83.1 %*	*40-140*		"	"	"	"	

Polynuclear Aromatic Compounds by EPA Method 8310

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-5@9 1/2-10 (L106002-02) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Naphthalene	**1030**	100	ug/kg	1	1F06020	06/06/01	06/09/01	EPA 8310	
Acenaphthylene	ND	500	"	"	"	"	"	"	
Acenaphthene	ND	100	"	"	"	"	"	"	
Fluorene	ND	20.0	"	"	"	"	"	"	
Phenanthrene	ND	10.0	"	"	"	"	"	"	
Anthracene	ND	10.0	"	"	"	"	"	"	
Fluoranthene	ND	20.0	"	"	"	"	"	"	
Pyrene	ND	10.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10.0	"	"	"	"	"	"	
Chrysene	ND	10.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	20.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	20.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	20.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	20.0	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*84.4 %*	*30-150*		*"*	*"*	*"*	*"*	
EB-5 (L106002-05) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Naphthalene	**256**	25.0	ug/l	5	1F07013	06/07/01	06/11/01	EPA 8310	
Acenaphthylene	ND	10.0	"	1	"	"	06/09/01	"	
Acenaphthene	ND	10.0	"	"	"	"	"	"	
Fluorene	ND	1.00	"	"	"	"	"	"	
Phenanthrene	ND	0.500	"	"	"	"	"	"	
Anthracene	ND	0.500	"	"	"	"	"	"	
Fluoranthene	ND	1.00	"	"	"	"	"	"	
Pyrene	ND	1.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.500	"	"	"	"	"	"	
Chrysene	ND	0.500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	2.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	2.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.500	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*104 %*	*30-150*		*"*	*"*	*"*	*"*	

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Polynuclear Aromatic Compounds by EPA Method 8310

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-7@9 1/2-10 (L106002-11) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Naphthalene	**577**	100	ug/kg	1	1F06020	06/06/01	06/09/01	EPA 8310	
Acenaphthylene	ND	500	"	"	"	"	"	"	
Acenaphthene	ND	100	"	"	"	"	"	"	
Fluorene	**162**	20.0	"	"	"	"	"	"	
Phenanthrene	**382**	10.0	"	"	"	"	"	"	
Anthracene	ND	10.0	"	"	"	"	"	"	
Fluoranthene	ND	20.0	"	"	"	"	"	"	
Pyrene	ND	10.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10.0	"	"	"	"	"	"	
Chrysene	ND	10.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	20.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	20.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	20.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	20.0	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*91.5 %*	*30-150*		*"*	*"*	*"*	*"*	
EB-7 (L106002-13) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00									
Naphthalene	**334**	25.0	ug/l	5	1F07013	06/07/01	06/11/01	EPA 8310	
Acenaphthylene	ND	10.0	"	1	"	"	06/09/01	"	
Acenaphthene	ND	10.0	"	"	"	"	"	"	
Fluorene	ND	1.00	"	"	"	"	"	"	
Phenanthrene	ND	0.500	"	"	"	"	"	"	
Anthracene	ND	0.500	"	"	"	"	"	"	
Fluoranthene	ND	1.00	"	"	"	"	"	"	
Pyrene	ND	1.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.500	"	"	"	"	"	"	
Chrysene	ND	0.500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	2.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	2.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.500	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*77.5 %*	*30-150*		*"*	*"*	*"*	*"*	

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Polynuclear Aromatic Compounds by EPA Method 8310

Sequoia Analytical - Morgan Hill

EB-8@9 1/2-10 (L106002-15) Soil Sampled: 05/31/01 00:00 Received: 06/01/01 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	**2360**	100	ug/kg	1	1F06020	06/06/01	06/09/01	EPA 8310	
Acenaphthylene	ND	500	"	"	"	"	"	"	
Acenaphthene	ND	100	"	"	"	"	"	"	
Fluorene	ND	20.0	"	"	"	"	"	"	
Phenanthrene	ND	10.0	"	"	"	"	"	"	
Anthracene	ND	10.0	"	"	"	"	"	"	
Fluoranthene	ND	20.0	"	"	"	"	"	"	
Pyrene	ND	10.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10.0	"	"	"	"	"	"	
Chrysene	ND	10.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	20.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	20.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	20.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	20.0	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*82.2 %*	*30-150*		"	"	"	"	

EB-10 (L106002-25) Water Sampled: 05/31/01 00:00 Received: 06/01/01 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	**20.2**	5.00	ug/l	1	1F07013	06/07/01	06/09/01	EPA 8310	
Acenaphthylene	ND	10.0	"	"	"	"	"	"	
Acenaphthene	ND	10.0	"	"	"	"	"	"	
Fluorene	ND	1.00	"	"	"	"	"	"	
Phenanthrene	ND	0.500	"	"	"	"	"	"	
Anthracene	ND	0.500	"	"	"	"	"	"	
Fluoranthene	ND	1.00	"	"	"	"	"	"	
Pyrene	ND	1.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.500	"	"	"	"	"	"	
Chrysene	ND	0.500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	2.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	2.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.500	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*91.5 %*	*30-150*		"	"	"	"	

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060007 - EPA 5030B (P/T)										
Blank (1060007-BLK1)				Prepared & Analyzed: 06/02/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*8.97*		"	*10.0*		*89.7*	*70-130*			
Blank (1060007-BLK2)				Prepared & Analyzed: 06/03/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*8.28*		"	*10.0*		*82.8*	*70-130*			
LCS (1060007-BS1)				Prepared & Analyzed: 06/02/01						
Benzene	8.55	0.50	ug/l	10.0		85.5	70-130			
Toluene	8.48	0.50	"	10.0		84.8	70-130			
Ethylbenzene	8.37	0.50	"	10.0		83.7	70-130			
Xylenes (total)	25.7	0.50	"	30.0		85.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.32*		"	*10.0*		*93.2*	*70-130*			
LCS (1060007-BS2)				Prepared & Analyzed: 06/02/01						
Purgeable Hydrocarbons as Gasoline	241	50	ug/l	250		96.4	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.86*		"	*10.0*		*98.6*	*70-130*			

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Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060007 - EPA 5030B (P/T)										
LCS (1060007-BS3)				Prepared & Analyzed: 06/03/01						
Benzene	8.60	0.50	ug/l	10.0		86.0	70-130			
Toluene	8.51	0.50	"	10.0		85.1	70-130			
Ethylbenzene	8.46	0.50	"	10.0		84.6	70-130			
Xylenes (total)	25.7	0.50	"	30.0		85.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.27*		*"*	*10.0*		*92.7*	*70-130*			
LCS (1060007-BS4)				Prepared & Analyzed: 06/03/01						
Purgeable Hydrocarbons as Gasoline	268	50	ug/l	250		107	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.56*		*"*	*10.0*		*95.6*	*70-130*			
Matrix Spike (1060007-MS1)	**Source: L106002-29**			Prepared & Analyzed: 06/03/01						
Purgeable Hydrocarbons as Gasoline	270	50	ug/l	250	ND	108	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.37*		*"*	*10.0*		*93.7*	*70-130*			
Matrix Spike Dup (1060007-MSD1)	**Source: L106002-29**			Prepared & Analyzed: 06/03/01						
Purgeable Hydrocarbons as Gasoline	270	50	ug/l	250	ND	108	60-140	0.00	25	
Surrogate: a,a,a-Trifluorotoluene	*8.55*		*"*	*10.0*		*85.5*	*70-130*			
Batch 1060017 - EPA 5030B (P/T)										
Blank (1060017-BLK1)				Prepared & Analyzed: 06/04/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.65*		*"*	*10.0*		*96.5*	*70-130*			

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Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060017 - EPA 5030B (P/T)										
Blank (1060017-BLK2)				Prepared & Analyzed: 06/05/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.88*		*"*	*10.0*		*98.8*	*70-130*			
LCS (1060017-BS1)				Prepared & Analyzed: 06/04/01						
Purgeable Hydrocarbons as Gasoline	220	50	ug/l				70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.6*		*"*	*10.0*		*106*	*70-130*			
LCS (1060017-BS4)				Prepared & Analyzed: 06/05/01						
Benzene	8.24	0.50	ug/l	10.0		82.4	70-130			
Toluene	8.02	0.50	"	10.0		80.2	70-130			
Ethylbenzene	8.18	0.50	"	10.0		81.8	70-130			
Xylenes (total)	24.5	0.50	"	30.0		81.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.88*		*"*	*10.0*		*88.8*	*70-130*			
LCS (1060017-BS5)				Prepared & Analyzed: 06/05/01						
Purgeable Hydrocarbons as Gasoline	197	50	ug/l	250		78.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.09*		*"*	*10.0*		*90.9*	*70-130*			
LCS (1060017-BS6)				Prepared & Analyzed: 06/04/01						
Benzene	9.71	0.50	ug/l				70-130			
Toluene	9.53	0.50	"				70-130			
Ethylbenzene	9.82	0.50	"				70-130			
Xylenes (total)	29.2	0.50	"				70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.96*		*"*	*10.0*		*99.6*	*70-130*			

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Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060017 - EPA 5030B (P/T)										
Matrix Spike (1060017-MS1)	**Source: L105190-01**			Prepared: 06/04/01	Analyzed: 06/05/01					
Benzene	9.91	0.50	ug/l	10.0	ND	99.1	60-140			
Toluene	9.14	0.50	"	10.0	ND	91.4	60-140			
Ethylbenzene	10.4	0.50	"	10.0	0.76	96.4	60-140			
Xylenes (total)	28.7	0.50	"	30.0	0.69	93.4	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.91*		*"*	*10.0*		*99.1*	*70-130*			
Matrix Spike Dup (1060017-MSD1)	**Source: L105190-01**			Prepared: 06/04/01	Analyzed: 06/05/01					
Benzene	9.32	0.50	ug/l	10.0	ND	93.2	60-140	6.14	25	
Toluene	8.66	0.50	"	10.0	ND	86.6	60-140	5.39	25	
Ethylbenzene	9.97	0.50	"	10.0	0.76	92.1	60-140	4.22	25	
Xylenes (total)	27.2	0.50	"	30.0	0.69	88.4	60-140	5.37	25	
Surrogate: a,a,a-Trifluorotoluene	*9.43*		*"*	*10.0*		*94.3*	*70-130*			
Batch 1060018 - EPA 5030B (MeOH)										
Blank (1060018-BLK1)				Prepared & Analyzed: 06/05/01						
Purgeable Hydrocarbons as Gasoline	ND	1.0	mg/kg							
Benzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Methyl tert-butyl ether	ND	0.050	"							
Surrogate: a,a,a-Trifluorotoluene	*0.218*		*"*	*0.200*		*109*	*60-140*			
LCS (1060018-BS1)				Prepared & Analyzed: 06/05/01						
Benzene	0.191	0.0050	mg/kg	0.200		95.5	70-130			
Toluene	0.188	0.0050	"	0.200		94.0	70-130			
Ethylbenzene	0.197	0.0050	"	0.200		98.5	70-130			
Xylenes (total)	0.582	0.0050	"	0.600		97.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*0.216*		*"*	*0.200*		*108*	*60-140*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060018 - EPA 5030B (MeOH)										
LCS (1060018-BS2)				Prepared & Analyzed: 06/05/01						
Purgeable Hydrocarbons as Gasoline	5.69	1.0	mg/kg	5.00		114	70-130			
Surrogate: a,a,a-Trifluorotoluene	*0.227*		*"*	*0.200*		*114*	*60-140*			
Matrix Spike (1060018-MS1)	**Source: L106003-01**			Prepared & Analyzed: 06/05/01						
Benzene	0.180	0.0050	mg/kg	0.200	ND	90.0	60-140			
Toluene	0.184	0.0050	"	0.200	ND	92.0	60-140			
Ethylbenzene	0.222	0.0050	"	0.200	ND	111	60-140			
Xylenes (total)	0.613	0.0050	"	0.600	0.053	93.3	60-140			
Surrogate: a,a,a-Trifluorotoluene	*0.203*		*"*	*0.200*		*102*	*60-140*			
Matrix Spike Dup (1060018-MSD1)	**Source: L106003-01**			Prepared & Analyzed: 06/05/01						
Benzene	0.158	0.0050	mg/kg	0.200	ND	79.0	60-140	13.0	25	
Toluene	0.168	0.0050	"	0.200	ND	84.0	60-140	9.09	25	
Ethylbenzene	0.198	0.0050	"	0.200	ND	99.0	60-140	11.4	25	
Xylenes (total)	0.522	0.0050	"	0.600	0.053	78.2	60-140	16.0	25	
Surrogate: a,a,a-Trifluorotoluene	*0.180*		*"*	*0.200*		*90.0*	*60-140*			
Batch 1060019 - EPA 5030B (P/T)										
Blank (1060019-BLK1)				Prepared & Analyzed: 06/05/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*8.82*		*"*	*10.0*		*88.2*	*70-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060019 - EPA 5030B (P/T)										
LCS (1060019-BS1)				Prepared & Analyzed: 06/05/01						
Benzene	8.31	0.50	ug/l	10.0		83.1	70-130			
Toluene	7.97	0.50	"	10.0		79.7	70-130			
Ethylbenzene	7.92	0.50	"	10.0		79.2	70-130			
Xylenes (total)	24.1	0.50	"	30.0		80.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.2*		"	*10.0*		*102*	*70-130*			
LCS (1060019-BS2)				Prepared & Analyzed: 06/05/01						
Purgeable Hydrocarbons as Gasoline	249	50	ug/l	250		99.6	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
Matrix Spike (1060019-MS1)	**Source: L105190-07**			Prepared: 06/05/01	Analyzed: 06/06/01					
Purgeable Hydrocarbons as Gasoline	275	50	ug/l	250	ND	110	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.8*		"	*10.0*		*108*	*70-130*			
Matrix Spike Dup (1060019-MSD1)	**Source: L105190-07**			Prepared: 06/05/01	Analyzed: 06/06/01					
Purgeable Hydrocarbons as Gasoline	270	50	ug/l	250	ND	108	60-140	1.83	25	
Surrogate: a,a,a-Trifluorotoluene	*11.0*		"	*10.0*		*110*	*70-130*			

Volatile Organic Oxygenated Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060009 - EPA 5030B [P/T]										
Blank (1060009-BLK1)				Prepared & Analyzed: 06/02/01						
Ethanol	ND	1000	ug/l							
Tert-butyl alcohol	ND	100	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	*48.6*		*"*	*50.0*		*97.2*	*76-114*			
Blank (1060009-BLK2)				Prepared & Analyzed: 06/04/01						
Ethanol	ND	1000	ug/l							
Tert-butyl alcohol	ND	100	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	*52.0*		*"*	*50.0*		*104*	*76-114*			
Blank (1060009-BLK3)				Prepared & Analyzed: 06/06/01						
Ethanol	ND	1000	ug/l							
Tert-butyl alcohol	ND	100	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	*52.1*		*"*	*50.0*		*104*	*76-114*			
LCS (1060009-BS1)				Prepared & Analyzed: 06/02/01						
Methyl tert-butyl ether	54.7	2.0	ug/l	50.0		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	*50.8*		*"*	*50.0*		*102*	*76-114*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Volatile Organic Oxygenated Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060009 - EPA 5030B [P/T]										
LCS (1060009-BS2)				Prepared & Analyzed: 06/04/01						
Methyl tert-butyl ether	50.9	2.0	ug/l	50.0		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	*52.3*		"	*50.0*		*105*	*76-114*			
LCS (1060009-BS3)				Prepared & Analyzed: 06/06/01						
Methyl tert-butyl ether	49.6	2.0	ug/l	50.0		99.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	*50.0*		"	*50.0*		*100*	*76-114*			
Matrix Spike (1060009-MS1)	**Source: L105219-11**			Prepared & Analyzed: 06/02/01						
Methyl tert-butyl ether	52.8	2.0	ug/l	50.0	ND	106	60-140			
Surrogate: 1,2-Dichloroethane-d4	*52.1*		"	*50.0*		*104*	*76-114*			
Matrix Spike Dup (1060009-MSD1)	**Source: L105219-11**			Prepared & Analyzed: 06/02/01						
Methyl tert-butyl ether	54.9	2.0	ug/l	50.0	ND	110	60-140	3.90	25	
Surrogate: 1,2-Dichloroethane-d4	*55.3*		"	*50.0*		*111*	*76-114*			

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Diesel Hydrocarbons (C9-C24) by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1F06021 - EPA 3580A										
Blank (1F06021-BLK1)				Prepared: 06/06/01	Analyzed: 06/08/01					
Diesel Range Hydrocarbons	ND	1.00	mg/kg							
Surrogate: n-Pentacosane	*1.20*		"	*1.67*		*71.9*	*50-150*			
LCS (1F06021-BS1)				Prepared: 06/06/01	Analyzed: 06/08/01					
Diesel Range Hydrocarbons	12.9	1.00	mg/kg	16.7		77.2	60-140			
Surrogate: n-Pentacosane	*1.40*		"	*1.67*		*83.8*	*50-150*			
Matrix Spike (1F06021-MS1)	**Source: L106002-02**			Prepared: 06/06/01	Analyzed: 06/09/01					
Diesel Range Hydrocarbons	50.8	1.00	mg/kg	16.7	25.5	151	50-150			S-02
Surrogate: n-Pentacosane	*1.40*		"	*1.67*		*83.8*	*50-150*			
Matrix Spike Dup (1F06021-MSD1)	**Source: L106002-02**			Prepared: 06/06/01	Analyzed: 06/09/01					
Diesel Range Hydrocarbons	39.6	1.00	mg/kg	16.7	25.5	84.4	50-150	24.8	50	
Surrogate: n-Pentacosane	*1.50*		"	*1.67*		*89.8*	*50-150*			
Batch 1F06024 - EPA 3510B										
Blank (1F06024-BLK1)				Prepared: 06/06/01	Analyzed: 06/08/01					
Diesel Range Hydrocarbons	ND	50.0	ug/l							
Surrogate: n-Pentacosane	*78.4*		"	*100*		*78.4*	*50-150*			
LCS (1F06024-BS1)				Prepared: 06/06/01	Analyzed: 06/08/01					
Diesel Range Hydrocarbons	621	50.0	ug/l	1000		62.1	60-140			
Surrogate: n-Pentacosane	*77.4*		"	*100*		*77.4*	*50-150*			
LCS Dup (1F06024-BSD1)				Prepared: 06/06/01	Analyzed: 06/08/01					
Diesel Range Hydrocarbons	629	50.0	ug/l	1000		62.9	60-140	1.28	50	
Surrogate: n-Pentacosane	*89.4*		"	*100*		*89.4*	*50-150*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1F06022 - EPA 3580A										
Blank (1F06022-BLK1)				Prepared: 06/06/01	Analyzed: 06/09/01					
Diesel Range Hydrocarbons	ND	1.00	mg/kg							
Surrogate: n-Pentacosane	*1.30*		"	*1.67*		*77.8*	*40-140*			
LCS (1F06022-BS1)				Prepared: 06/06/01	Analyzed: 06/09/01					
Diesel Range Hydrocarbons	13.4	1.00	mg/kg	16.7		80.2	40-140			
Surrogate: n-Pentacosane	*1.20*		"	*1.67*		*71.9*	*40-140*			
Matrix Spike (1F06022-MS1)		**Source: L106002-23**		Prepared: 06/06/01	Analyzed: 06/11/01					
Diesel Range Hydrocarbons	136	10.0	mg/kg	16.7	219	NR	40-140			Q-01
Surrogate: n-Pentacosane	*1.40*		"	*1.67*		*83.8*	*40-140*			
Matrix Spike Dup (1F06022-MSD1)		**Source: L106002-23**		Prepared: 06/06/01	Analyzed: 06/11/01					
Diesel Range Hydrocarbons	175	10.0	mg/kg	16.7	219	NR	40-140	25.1	50	Q-01
Surrogate: n-Pentacosane	*1.50*		"	*1.67*		*89.8*	*40-140*			
Batch 1F07005 - EPA 3510B										
Blank (1F07005-BLK1)				Prepared: 06/07/01	Analyzed: 06/09/01					
Diesel Range Hydrocarbons	ND	50.0	ug/l							
Surrogate: n-Pentacosane	*69.6*		"	*100*		*69.6*	*40-140*			
LCS (1F07005-BS1)				Prepared: 06/07/01	Analyzed: 06/09/01					
Diesel Range Hydrocarbons	733	50.0	ug/l	1000		73.3	40-140			
Surrogate: n-Pentacosane	*85.2*		"	*100*		*85.2*	*40-140*			
LCS Dup (1F07005-BSD1)				Prepared: 06/07/01	Analyzed: 06/09/01					
Diesel Range Hydrocarbons	672	50.0	ug/l	1000		67.2	40-140	8.68	50	
Surrogate: n-Pentacosane	*76.9*		"	*100*		*76.9*	*40-140*			

Polynuclear Aromatic Compounds by EPA Method 8310 - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1F06020 - EPA 3550A Sonicate										
Blank (1F06020-BLK1)				Prepared: 06/06/01 Analyzed: 06/08/01						
Naphthalene	ND	100	ug/kg							
Acenaphthylene	ND	500	"							
Acenaphthene	ND	100	"							
Fluorene	ND	20.0	"							
Phenanthrene	ND	10.0	"							
Anthracene	ND	10.0	"							
Fluoranthene	ND	20.0	"							
Pyrene	ND	10.0	"							
Benzo (a) anthracene	ND	10.0	"							
Chrysene	ND	10.0	"							
Benzo (b) fluoranthene	ND	20.0	"							
Benzo (k) fluoranthene	ND	10.0	"							
Benzo (a) pyrene	ND	10.0	"							
Dibenz (a,h) anthracene	ND	20.0	"							
Benzo (ghi) perylene	ND	20.0	"							
Indeno (1,2,3-cd) pyrene	ND	20.0	"							
Surrogate: 2-Fluorobiphenyl	*5750*		*"*	*6670*		*86.2*	*30-150*			
LCS (1F06020-BS1)				Prepared: 06/06/01 Analyzed: 06/08/01						
Naphthalene	1480	100	ug/kg	1670		88.6	30-150			
Phenanthrene	143	10.0	"	167		85.6	30-150			
Benzo (k) fluoranthene	148	10.0	"	167		88.6	30-150			
Surrogate: 2-Fluorobiphenyl	*5770*		*"*	*6670*		*86.5*	*30-150*			
Matrix Spike (1F06020-MS1)	Source: MKF0033-04			Prepared: 06/06/01 Analyzed: 06/08/01						
Naphthalene	1410	100	ug/kg	1670	ND	84.4	30-150			
Phenanthrene	142	10.0	"	167	16.3	75.3	30-150			
Benzo (k) fluoranthene	159	10.0	"	167	ND	90.1	30-150			
Surrogate: 2-Fluorobiphenyl	*5620*		*"*	*6670*		*84.3*	*30-150*			

Polynuclear Aromatic Compounds by EPA Method 8310 - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1F06020 - EPA 3550A Sonicate										
Matrix Spike Dup (1F06020-MSD1)		**Source: MKF0033-04**		Prepared: 06/06/01		Analyzed: 06/09/01				
Naphthalene	1350	100	ug/kg	1670	ND	80.8	30-150	4.35	50	
Phenanthrene	139	10.0	"	167	16.3	73.5	30-150	2.14	50	
Benzo (k) fluoranthene	159	10.0	"	167	ND	90.1	30-150	0.00	50	
Surrogate: 2-Fluorobiphenyl	*5510*		*"*	*6670*		*82.6*	*30-150*			
Batch 1F07013 - EPA 3510B SepFun										
Blank (1F07013-BLK1)				Prepared: 06/07/01		Analyzed: 06/09/01				
Naphthalene	ND	5.00	ug/l							
Acenaphthylene	ND	10.0	"							
Acenaphthene	ND	10.0	"							
Fluorene	ND	1.00	"							
Phenanthrene	ND	0.500	"							
Anthracene	ND	0.500	"							
Fluoranthene	ND	1.00	"							
Pyrene	ND	1.00	"							
Benzo (a) anthracene	ND	0.500	"							
Chrysene	ND	0.500	"							
Benzo (b) fluoranthene	ND	1.00	"							
Benzo (k) fluoranthene	ND	0.500	"							
Benzo (a) pyrene	ND	0.500	"							
Dibenz (a,h) anthracene	ND	2.00	"							
Benzo (ghi) perylene	ND	2.00	"							
Indeno (1,2,3-cd) pyrene	ND	0.500	"							
Surrogate: 2-Fluorobiphenyl	*173*		*"*	*200*		*86.5*	*30-150*			
LCS (1F07013-BS1)				Prepared: 06/07/01		Analyzed: 06/09/01				
Naphthalene	44.8	5.00	ug/l	50.0		89.6	30-150			
Phenanthrene	4.47	0.500	"	5.00		89.4	30-150			
Benzo (k) fluoranthene	4.06	0.500	"	5.00		81.2	30-150			
Surrogate: 2-Fluorobiphenyl	*177*		*"*	*200*		*88.5*	*30-150*			

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Polynuclear Aromatic Compounds by EPA Method 8310 - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1F07013 - EPA 3510B SepFun										
LCS Dup (1F07013-BSD1)				Prepared: 06/07/01	Analyzed: 06/09/01					
Naphthalene	43.9	5.00	ug/l	50.0		87.8	30-150	2.03	50	
Phenanthrene	4.39	0.500	"	5.00		87.8	30-150	1.81	50	
Benzo (k) fluoranthene	4.14	0.500	"	5.00		82.8	30-150	1.95	50	
Surrogate: 2-Fluorobiphenyl	*174*		"	*200*		*87.0*	*30-150*			

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Notes and Definitions

D-14	Chromatogram Pattern: Weathered Diesel C9-C24
D-15	Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
D-17	Chromatogram Pattern: Weathered Diesel C9-C24 + Unidentified Hydrocarbons C9-C24
O-04	This sample was diluted due to high non-target compounds.
P-01	Chromatogram Pattern: Gasoline C6-C12
P-02	Chromatogram Pattern: Weathered Gasoline C6-C12
Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
S-01	The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interferences.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interferences.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

CHAIN OF CUSTODY RECORD

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San Ramon 94583
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Project Name: Matadero Creek
Job No.: 1453-1E
Report To: Leonardo Alvarez
Sampler (print): James P. Kiernan
Sampler (signature):
QC Requirement: ☒ Level A (standard)

Turnaround Requirements
☒ 5 Working Days
☐ 48 Hours
☐ 24 Hours
☐ 2-3 Hours RUSH
☐ ____________

ANALYSES REQUESTED

Sample I.D.	Date	Time	Lab I.D.	Sample Matrix	No. of Cont.	TPH as gas/BTEX/MTBE (8015/8020)	TPH as diesel (8015M) silica gel column	TRPH (418.1) silica gel column	Halogenated VOCs (8010) (8021 or 8260)	Organochlorine Pesticides (8081)	Metals As, Hg, Pb, Cd	Fuel Oxygenates (8260B)	PAHs (8310)	PCBs (8082)	Fuel Scan 8020/8015M (Purgeable and Extractable)			Remarks
EB-12 @ 7.5-8	6/28/01	0900	L107011-01	soil	1	X	X											
EB-12	6/28/01	0900	-02	g-H2O	6	X	X											
EB-13 @ 7-7.5	6/28/01	1101	-03	soil	1	X	X											
EB-13	6/28/01	1130	-04	g-H2O	6	X	X											
EB-14 @ 7-7.5	6/28/01	1306	-05	soil	1	X	X											
EB-14	6/28/01	1330	-06	g-H2O	6	X	X											
EB-15 @ 7.5-8	6/28/01	1425	-07	soil	1	X	X											
~~EB-16~~				~~g-H2O~~	~~6~~													
EB-15	6/28/01	1452	-08	g-H2O	1	X	X											
EB-12 @ 4.5-5	6/28/01	0830	-09	soil	1	X	X											Hold

Relinquished By: Date: 6/29/01 Time: 0820
Received By: Date: 6/29 Time: 215 PM
PM Initial:
Relinquished By: Date: 6/29 Time: 245 PM
Received By: K. Gu Date: 6/29 Time: 1445
Relinquished By: Date: Time:
Lab of Record: Sequoia
Temp:
Received by Lab: Date: Time:

[redacted]

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 885 Jarvis Drive • Morgan Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 FAX (925) 988-9673
☐ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 FAX (707) 792-0342
☒ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: Lowney Associates		Project Name: Palo Alto Municipal Services Center
Mailing Address: 405 Clyde Ave		Billing Address (if different):
City: Mt View State: CA	Zip Code: 94043	
Telephone: 650-967-2365	FAX #: 650-967-2795	P.O. #: 1453-1E
Report To: Stason Foster	Sampler: James Kiernan	QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time:
☐ 10 Working Days ☐ 3 Working Days ☐ 2 - 8 Hours
☐ 7 Working Days ☐ 2 Working Days
☒ 5 Working Days ☐ 24 Hours

☐ Drinking Water
☐ Waste Water
☐ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPHd	TPHg, BTEX, MTBE	PAHs (8310)	Fuel Oxygenates 8260	Porosity	Fractional organic Carbon				Comments
✓ 1. EB-5 @ 7-7½'	5/31/01	soil	1	acetate	U06002										HOLD
✓ 2. EB-5 @ 9½-10'	↓	↓	↓	↓	↓	X	X	X							
✓ 3. EB-5 @ 11½-12'	↓	↓	↓	↓	↓										HOLD
✓ 4. EB-5 @ 13½-14'	↓	↓	↓	↓	↓										HOLD
✓ 5. EB-5	↓	water	2 amber 8 VOA	10	↓	X	X	X	X						
✓ 6. EB-6 @ 4½-5'	↓	soil	1	acetate	↓					X	X				
✓ 7. EB-6 @ 9½-10'	↓	↓	↓	↓	↓	X	X								
✓ 8. EB-6 @ 14½-15'	↓	↓	↓	↓	↓										HOLD
✓ 9. EB-6	↓	water	6	2 amber 4 VOA	↓	X	X								
✓ 10. EB-7 @ 4½-5'	↓	soil	1	acetate	↓										HOLD

Relinquished By:	Date: 5/31/01	Time: 6:00P	Received By: K. Will	Date: 5/31/01	Time: 6 pm
Relinquished By: K. Will	Date: 6/1/01	Time:	Received By: WHS	Date: ~~5~~ 6-1	Time: 1055
Relinquished By:	Date:	Time:	Received By: K.	Date: 6-1	Time: 11:00

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment

Pink - Client
Yellow - Sequoia
White - Sequoia

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

☐ 88[illegible]vis [illegible] • Morgan Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 FAX (925) 988-9673
☐ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 FAX (707) 792-0342
☒ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: Lowney Associates
Project Name: Palo Alto Municipal Service Center
Mailing Address: 405 Clyde Ave
Billing Address (if different):
City: Mt. View State: CA Zip Code: 94043
Telephone: 650-967-2365 FAX #: 650-967-2785
P.O. #: 1453-1E
Report To: Stason Foster
Sampler: James Kiernan
QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☐ 10 Working Days ☐ 7 Working Days ☒ 5 Working Days ☐ 3 Working Days ☐ 2 Working Days ☐ 24 Hours ☐ 2 - 8 Hours

☐ Drinking Water
☐ Waste Water
☐ Other

Analyses Requested

	Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPHd	TPHg, BTEX, MTBE	PAHs (8310)	Porosity	Fractional organic Carbon					Comments
✓	1. EB-7@9½-10'	5/31/01	soil	1	acetate	C106022	X	X	X							
✓	2. EB-7@14½-15'	↓	↓	↓	↓	↓										HOLD
✓	3. EB-7	5/31/01	water	6	2 amber 4 VOA	↓	X	X	X							
✓	4. EB-8@4½-5'	↓	soil	1	acetate	↓										HOLD
✓	5. EB-8@9½-10'	↓	↓	↓	↓	↓	X	X	X	X	X					
✓	6. EB-8@14½-15'	↓	↓	↓	↓	↓										HOLD
✓	7. EB-8	↓	water	6	2 amber 4 VOA	↓	X	X								
✓	8. EB-9@4½-5'	↓	soil	1	acetate	↓										HOLD
✓	9. EB-9@10½-11'	↓	↓	↓	↓	↓	X	X		X	X					
✓	10. EB-9@14½-15'	↓	↓	↓	↓	↓										HOLD

Relinquished By:	Date: 5/31/01	Time: 6:00P	Received By: K. Witt	Date: 6/1/01	Time: 6 pm
Relinquished By: K. Witt	Date: 6/1/01	Time: 4pm	Received By: wkB	Date: 6-1	Time: 1005
Relinquished By:	Date:	Time:	Received By: K. Ba	Date: 6/1	Time: 11:06

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment

Page 2 of 3

Pink - Client
Yellow - Sequoia
White - Sequoia

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

[redacted] 885[redacted]is D[redacted] Mo[redacted]Hill, [redacted]503[redacted]08) [redacted]960[redacted]X (4[redacted]782-[redacted]
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 FAX (925) 988-9673
☐ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 FAX (707) 792-0342
☒ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: Lowney Associates			Project Name: Palo Alto Municipal Service Center
Mailing Address: 405 Clyde Ave			Billing Address (if different):
City: Mt. View	State: CA	Zip Code: 94043	
Telephone: 650-967-2365		FAX #: 650-967-2785	P.O. #: 1453-1E
Report To: Stason Foster	Sampler: James Kiernan		QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☐ 10 Working Days ☐ 7 Working Days ☒ 5 Working Days ☐ 3 Working Days ☐ 2 Working Days ☐ 24 Hours ☐ 2 - 8 Hours

☐ Drinking Water
☐ Waste Water
☒ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPHd	TPHg, BTEX, MTBE	PAHs (8310)	Fuel oxygenates 8260	Silica Gel cleanup						Comments
✓ 1. EB-9	5/31/01	water	10	2 amber 8 VOA	L106002	X	X		X							
✓ 2. EB-10 @ 5½-6'	↓	soil	1	brass	↑											HOLD
✓ 3. EB-10 @ 9½-10'		↓	↓	↓		X	X			X						
✓ 4. EB-10 @ 14½-15'																HOLD
✓ 5. EB-10		water	6	2 amber 4 VOA		X	X	X		X						
✓ 6. EB-11 @ 5½-6'		soil	1	brass												HOLD
✓ 7. EB-11 @ 11½-12'		↓	↓	↓		X	X			X						
✓ 8. EB-11 @ 14½-15'																HOLD
✓ 9. EB-11		water	6	2 amber 4 VOA		X	X			X						
10.																

Relinquished By:	Date: 5/31/01	Time: 6:00 P	Received By: K. Wilk	Date: 5/31	Time: 6 pm
Relinquished By: K. Wilk	Date: 6/1/00	Time:	Received By: K. Wilk	Date: ~~5/31~~ 6/1	Time: 1005
Relinquished By:	Date:	Time:	Received By: K. Co	Date: 6/1	Time: 1100

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment__________ Page 3 of 3

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

July 25 , 2001

Leonardo Alvarez
Lowney Associates
405 Clyde Ave
Mountain View, CA 94043
RE: - / L107011

Enclosed are the results of analyses for samples received by the laboratory on 06/29/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Richard Yee
for

Latonya Pelt
Project Manager

CA ELAP Certificate Number 2360

Lowney Associates 405 Clyde Ave Mountain View CA, 94043	Project: - Project Number: Matadero Creek Project Manager: Leonardo Alvarez	Reported: 07/13/01 14:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EB-12@7.5-8	L107011-01	Soil	06/28/01 09:00	06/29/01 14:45
EB-12	L107011-02	Water	06/28/01 09:00	06/29/01 14:45
EB-13@7-7.5	L107011-03	Soil	06/28/01 11:01	06/29/01 14:45
EB-13	L107011-04	Water	06/28/01 11:30	06/29/01 14:45
EB-14@7-7.5	L107011-05	Soil	06/28/01 13:06	06/29/01 14:45
EB-14	L107011-06	Water	06/28/01 13:30	06/29/01 14:45
EB-15@7.5-8	L107011-07	Soil	06/28/01 14:25	06/29/01 14:45
EB-15	L107011-08	Water	06/28/01 14:52	06/29/01 14:45
EB-12@4.5-5	L107011-09	Soil	06/28/01 08:30	06/29/01 14:45

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8020

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-12@7.5-8 (L107011-01) Soil Sampled: 06/28/01 09:00 Received: 06/29/01 14:45									
Purgeable Hydrocarbons as Gasoline	ND	1.0	mg/kg	1	1070014	07/03/01	07/07/01	DHS LUFT	
Benzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.0 %*	*60-140*		"	"	"	"	
EB-12 (L107011-02) Water Sampled: 06/28/01 09:00 Received: 06/29/01 14:45									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1070031	07/09/01	07/09/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.3 %*	*70-130*		"	"	"	"	
EB-13@7-7.5 (L107011-03) Soil Sampled: 06/28/01 11:01 Received: 06/29/01 14:45									
Purgeable Hydrocarbons as Gasoline	ND	1.0	mg/kg	1	1070014	07/03/01	07/07/01	DHS LUFT	
Benzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*91.5 %*	*60-140*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8020

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-13 (L107011-04) Water Sampled: 06/28/01 11:30 Received: 06/29/01 14:45									**M-03**
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1070031	07/09/01	07/09/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*79.0 %*	*70-130*		*"*	*"*	*"*	*"*	
EB-14@7-7.5 (L107011-05) Soil Sampled: 06/28/01 13:06 Received: 06/29/01 14:45									
Purgeable Hydrocarbons as Gasoline	ND	1.0	mg/kg	1	1070014	07/03/01	07/07/01	DHS LUFT	
Benzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.5 %*	*60-140*		*"*	*"*	*"*	*"*	
EB-14 (L107011-06) Water Sampled: 06/28/01 13:30 Received: 06/29/01 14:45									**M-03**
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1070031	07/09/01	07/09/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.3 %*	*70-130*		*"*	*"*	*"*	*"*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8020

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-15@7.5-8 (L107011-07) Soil Sampled: 06/28/01 14:25 Received: 06/29/01 14:45									
Purgeable Hydrocarbons as Gasoline	ND	1.0	mg/kg	1	1070014	07/03/01	07/07/01	DHS LUFT	
Benzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*83.0 %*	*60-140*		*"*	*"*	*"*	*"*	
EB-15 (L107011-08) Water Sampled: 06/28/01 14:52 Received: 06/29/01 14:45									**M-03**
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1070030	07/07/01	07/07/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.4 %*	*70-130*		*"*	*"*	*"*	*"*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-12@7.5-8 (L107011-01) Soil Sampled: 06/28/01 09:00 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	1.0	mg/kg	1	1G05003	07/05/01	07/10/01	DHS LUFT	
Surrogate: n-Pentacosane		*77.8 %*	*40-140*		"	"	"	"	
EB-12 (L107011-02RE1) Water Sampled: 06/28/01 09:00 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	83	ug/l	1	1G12022	07/05/01	07/13/01	DHS LUFT	
Surrogate: n-Pentacosane		*76.0 %*	*40-140*		"	"	"	"	
EB-13@7-7.5 (L107011-03) Soil Sampled: 06/28/01 11:01 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	1.0	mg/kg	1	1G05003	07/05/01	07/10/01	DHS LUFT	
Surrogate: n-Pentacosane		*83.8 %*	*40-140*		"	"	"	"	
EB-13 (L107011-04RE1) Water Sampled: 06/28/01 11:30 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	50	ug/l	1	1G12022	07/05/01	07/13/01	DHS LUFT	
Surrogate: n-Pentacosane		*84.7 %*	*40-140*		"	"	"	"	
EB-14@7-7.5 (L107011-05) Soil Sampled: 06/28/01 13:06 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	1.0	mg/kg	1	1G05003	07/05/01	07/10/01	DHS LUFT	
Surrogate: n-Pentacosane		*77.8 %*	*40-140*		"	"	"	"	
EB-14 (L107011-06RE1) Water Sampled: 06/28/01 13:30 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	50	ug/l	1	1G12022	07/05/01	07/13/01	DHS LUFT	
Surrogate: n-Pentacosane		*72.5 %*	*40-140*		"	"	"	"	
EB-15@7.5-8 (L107011-07) Soil Sampled: 06/28/01 14:25 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	1.0	mg/kg	1	1G05003	07/05/01	07/10/01	DHS LUFT	
Surrogate: n-Pentacosane		*77.8 %*	*40-140*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EB-15 (L107011-08RE1) Water Sampled: 06/28/01 14:52 Received: 06/29/01 14:45									
Diesel Range Hydrocarbons	ND	50	ug/l	1	1G12022	07/05/01	07/13/01	DHS LUFT	
Surrogate: n-Pentacosane		*86.6 %*	*40-140*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8020 - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1070014 - EPA 5030B (MeOH)										
Blank (1070014-BLK1)				Prepared: 07/03/01		Analyzed: 07/05/01				
Purgeable Hydrocarbons as Gasoline	ND	1.0	mg/kg							
Benzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Methyl tert-butyl ether	ND	0.050	"							
Surrogate: a,a,a-Trifluorotoluene	*0.214*		"	*0.200*		*107*	*60-140*			
LCS (1070014-BS1)				Prepared: 07/03/01		Analyzed: 07/05/01				
Benzene	0.228	0.0050	mg/kg	0.200		114	70-130			
Toluene	0.227	0.0050	"	0.200		114	70-130			
Ethylbenzene	0.238	0.0050	"	0.200		119	70-130			
Xylenes (total)	0.714	0.0050	"	0.600		119	70-130			
Surrogate: a,a,a-Trifluorotoluene	*0.204*		"	*0.200*		*102*	*60-140*			
LCS (1070014-BS2)				Prepared: 07/03/01		Analyzed: 07/05/01				
Purgeable Hydrocarbons as Gasoline	4.90	1.0	mg/kg	5.00		98.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*0.205*		"	*0.200*		*102*	*60-140*			
Matrix Spike (1070014-MS1)	**Source: L106191-30**			Prepared: 07/03/01		Analyzed: 07/05/01				
Purgeable Hydrocarbons as Gasoline	4.64	1.0	mg/kg	5.00	ND	92.8	60-140			
Surrogate: a,a,a-Trifluorotoluene	*0.199*		"	*0.200*		*99.5*	*60-140*			
Matrix Spike Dup (1070014-MSD1)	**Source: L106191-30**			Prepared: 07/03/01		Analyzed: 07/05/01				
Purgeable Hydrocarbons as Gasoline	4.89	1.0	mg/kg	5.00	ND	97.8	60-140	5.25	25	
Surrogate: a,a,a-Trifluorotoluene	*0.194*		"	*0.200*		*97.0*	*60-140*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8020 - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1070030 - EPA 5030B (P/T)										
Blank (1070030-BLK1)				Prepared & Analyzed: 07/07/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.79*		*"*	*10.0*		*97.9*	*70-130*			
LCS (1070030-BS1)				Prepared & Analyzed: 07/07/01						
Benzene	9.43	0.50	ug/l	10.0		94.3	70-130			
Toluene	9.24	0.50	"	10.0		92.4	70-130			
Ethylbenzene	9.43	0.50	"	10.0		94.3	70-130			
Xylenes (total)	28.7	0.50	"	30.0		95.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.00*		*"*	*10.0*		*90.0*	*70-130*			
LCS (1070030-BS2)				Prepared & Analyzed: 07/07/01						
Purgeable Hydrocarbons as Gasoline	262	50	ug/l	250		105	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.64*		*"*	*10.0*		*96.4*	*70-130*			
Matrix Spike (1070030-MS1)	**Source: L106207-06**			Prepared & Analyzed: 07/07/01						
Benzene	10.1	0.50	ug/l	10.0	ND	101	60-140			
Toluene	9.93	0.50	"	10.0	ND	99.3	60-140			
Ethylbenzene	10.3	0.50	"	10.0	ND	103	60-140			
Xylenes (total)	31.1	0.50	"	30.0	ND	104	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.62*		*"*	*10.0*		*96.2*	*70-130*			
Matrix Spike Dup (1070030-MSD1)	**Source: L106207-06**			Prepared & Analyzed: 07/07/01						
Benzene	10.5	0.50	ug/l	10.0	ND	105	60-140	3.88	25	
Toluene	10.3	0.50	"	10.0	ND	103	60-140	3.66	25	
Ethylbenzene	10.6	0.50	"	10.0	ND	106	60-140	2.87	25	
Xylenes (total)	32.3	0.50	"	30.0	ND	108	60-140	3.79	25	
Surrogate: a,a,a-Trifluorotoluene	*9.75*		*"*	*10.0*		*97.5*	*70-130*			

Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G05003 - EPA 3550A										
Blank (1G05003-BLK1)				Prepared: 07/05/01 Analyzed: 07/10/01						
Diesel Range Hydrocarbons	ND	1.0	mg/kg							
Surrogate: n-Pentacosane	*1.40*		"	*1.67*		*83.8*	*40-140*			
LCS (1G05003-BS1)				Prepared: 07/05/01 Analyzed: 07/10/01						
Diesel Range Hydrocarbons	15.1	1.0	mg/kg	16.7		90.4	40-140			
Surrogate: n-Pentacosane	*1.60*		"	*1.67*		*95.8*	*40-140*			
LCS Dup (1G05003-BSD1)				Prepared: 07/05/01 Analyzed: 07/10/01						
Diesel Range Hydrocarbons	15.1	1.0	mg/kg	16.7		90.4	40-140	0.00	40	
Surrogate: n-Pentacosane	*1.40*		"	*1.67*		*83.8*	*40-140*			
Batch 1G12022 - EPA 3510B										
Blank (1G12022-BLK1)				Prepared: 07/12/01 Analyzed: 07/13/01						
Diesel Range Hydrocarbons	ND	50	ug/l							
Surrogate: n-Pentacosane	*82.6*		"	*100*		*82.6*	*40-140*			
LCS (1G12022-BS1)				Prepared: 07/12/01 Analyzed: 07/13/01						
Diesel Range Hydrocarbons	641	50	ug/l	1000		64.1	40-140			
Surrogate: n-Pentacosane	*92.5*		"	*100*		*92.5*	*40-140*			
LCS Dup (1G12022-BSD1)				Prepared: 07/12/01 Analyzed: 07/13/01						
Diesel Range Hydrocarbons	542	50	ug/l	1000		54.2	40-140	16.7	50	
Surrogate: n-Pentacosane	*81.8*		"	*100*		*81.8*	*40-140*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Environmental/Geotechnical/Engineering Services

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Project Name: Matadero Creek

Job No.: 1453-1E

Report To: Leonardo Alvarez

Sampler (print): James P. Kiernan

Sampler (signature):

QC Requirement: ☒ Level A (standard)

Turnaround Requirements

☒ 5 Working Days
☐ 48 Hours
☐ 24 Hours
☐ 2-3 Hours RUSH
☐ ____________

ANALYSES REQUESTED

Sample I.D.	Date	Time	Lab I.D.	Sample Matrix	No. of Cont.	TPH as gas/BTEX/MTBE (8015/8020)	TPH as diesel (8015M) silica gel column	TRPH (418.1) silica gel column	Halogenated VOCs (8010) (8021 or 8260)	Organochlorine Pesticides (8081)	Metals As, Hg, Pb, Cd	Fuel Oxygenates (8260B)	PAHs (8310)	PCBs (8082)	Fuel Scan 8020/8015M (Purgeable and Extractable)			Remarks
EB-12 @ 7.5-8	6/28/01	0900	L107011-01	soil	1	X	X											
EB-12	6/28/01	0900	-02	g-H2O	6	X	X											
EB-13 @ 7-7.5	6/28/01	1101	-03	soil	1	X	X											
EB-13	6/28/01	1130	-04	g-H2O	6	X	X											
EB-14 @ 7-7.5	6/28/01	1306	-05	soil	1	X	X											
EB-14	6/28/01	1330	-06	g-H2O	6	X	X											
EB-15 @ 7.5-8	6/28/01	1425	-07	soil	1	X	X											
~~EB-15~~				~~g-H2O~~	~~6~~													
EB-15	6/28/01	1452	-08	g-H2O	1	X	X											
EB-12 @ 4.5-5	6/28/01	0830	-08	soil	1	X	X											Hold

Relinquished By: Date: 6/29/01 Time: 0820
Received By: Date: 6/29 Time: 215PM
PM Initial:

Relinquished By: Date: 6/29 Time: 245PM
Received By: K. G. Date: 6/29 Time: 1445

Relinquished By: Date: Time:
Lab of Record: Sequoia
Temp:

Received by Lab: Date: Time: